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Banking from the inside.

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BANKING FROM THE INSIDE

Submitted by

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CONTENTS

INTRODUCTION

Acting upon the theory that teachers of business subjects need to acquire the business man's point of view, and that present problems should be the basis of our banking work in school, the writer undertook an investigation in a large city bank in Boston.

It was an attempt to get beyond the academic point of view, into the field of business, with the hope that the information secured might prove profitable as a basis for a unit of school work in the future.

The need for this type of work is very great. It is the opinion of authorities in commercial education that such field studies will be required of commercial teachers in the near future.

It is easy to understand this attitude on the part of educators when one considers the rapidity with which business conditions change. Textbooks cannot hope to keep pace with these changes. The only competent teacher of business subjects is the one who is so well informed in the fundamentals of

the subject, not only through reading, but through experience and contact, that he is able to trace with the students from day to day the various trends and changes.

The importance of a thorough understanding of sound banking and business principles has never been brought home to the American people more forcefully than in the past four years. Business is a vital part of our every day life. It is the duty of the schools to develop citizens who can cope with problems growing out of life situations so that in a time of stress they will have a background for intelligent thinking and wise judgment. To develop such citizens we must present problems to them for their solution. The problems must come directly from business as they will not be found in present texts. In order to get these problems the teacher must go into the business house, bank or factory to secure first hand information. The teacher cannot lead the students forward without a factual basis for the work. Experience and social and business contacts are needed in order to make the work significant. Students must be given a knowledge of conditions as they

actually exist if they are to intelligently solve present problems.

The theory of using present problems as a basis for school work was fixed in mind, but the question was whether or not it would be possible for a teacher to get at the problems of business. Would a banker be willing to allow me to go into his offices, make contacts with his employees, and work with them? Would he open his books to me and permit me to do my own investigating and take off whatever figures I desired? If I were willing to spend the time, would he cooperate? If he did cooperate, would the investigation give me the desired information which would result in my acquiring a broader vision of the bank and its functions? Would there be any information which I could secure which might be profitably used in the classroom and lead the students to a better understanding of the bank? It was these questions which finally led to the present investigation.

The writer does not consider this study a contribution to education. It is intended only to show that it is possible for teachers to make desirable

business contacts and secure definite information which could be used as a basis for a unit of school work.

It is not expected that every teacher could or would conduct such an investigation. The time required for such a study is an important factor. Beyond this, however, there are certain elements which might seriously impair the success of such an investigation. The most important of these, perhaps, is the approach to the source of the information, while personality and ability may prove just as vital. There is no assurance that teachers will be acceptably received. Whether or not one is permitted the freedom which was permitted in this investigation depends entirely upon the three factors previously mentioned.

One should go to the bank or business house, only when the problem is well defined and then only if fortified with all the knowledge pertinent to the subject that one is able to obtain outside of the bank. Once admission has been gained, the utmost tact and discrimination must be used. One should proceed quietly and observe all of the courtesies. When information is given, it should be studied in the light

of one's reading and only significant questions should be asked. These questions, if they are to result in a somewhat lengthy explanation, should be asked only when they will incur the least interruption in the regular daily routine work of the bank or business.

All of the information desired may not be revealed at once, but one's attitude toward the work, one's earnestness of purpose and industry, will determine the willingness of the staff to render assistance.

One must keep clearly in mind that the bank or business house is open primarily to do business and make a profit, and any interference with the regular processes will soon be considered a nuisance and quickly dispensed with. There is no time for dallying, no time for half-hearted interest and no time for insincerity.

Unless the investigator has his purpose well defined, is willing to cooperate with undivided attention and to be as unobtrusive as possible, it is not advisable to attempt such a study.

There is one other courtesy which must be observed and that is with regard to the revelation of the data collected. The investigator should reveal, under

the name of the institution which permitted the investigation, only those facts authorized by the officials. No information should be revealed without the consent of the officers of the bank or some authorized person. Any information given in confidence must remain entirely confidential.

Keeping these few points in mind, if the proper approach is made and the right attitude toward the work is maintained throughout the investigation, there should be no difficulty in securing any information desired for school purposes.

This study proves that business is ready and willing to assist in every way possible and that teachers can secure information from business houses regarding present problems which, if properly handled in the classroom, can make their teaching very significant. The solution of such problems should lead, as it did in the case of the investigator, to a better understanding of the business man's point of view.

CHAPTER I

THE PROBLEM

Problem: To discover whether it is possible for a teacher of commercial subjects to secure from a bank inside information which would give her a wider and more significant knowledge of the subject and serve as a basis for the banking unit of work in the commercial field of education.

The problem arose out of a felt need for a broader background for the teacher which, in turn, might be carried over into the classroom and result in a better understanding of banking on the part of the students.

From observations made in schools and, after reading the banking units in various texts, it appeared to the writer that the work needed vitalizing. The real problems of the bank were not being discussed. The work centered around defining the various kinds of banks - Commercial, Savings, Cooperative, etc., making out checks and deposit slips, and reading statements.

The value of this type of work is not to be discounted. It is very essential. It teaches the mechanics of banking from the depositors' point of

view. It does not lead, however, to a fuller comprehension of the bank and its functions.

It occurred to the writer that if it were possible for the teacher to get into a banking institution and study some phase or phases of banking from the inside it might be possible to correlate the findings with the regular work and, having gained a better understanding, help the students to acquire the broader vision of banking which is so desirable.

Whether or not such an approach could be made, or such information secured was problematical, but worthy of investigation.

Procedure: The writer realized that it would be necessary to gain considerable background information regarding the various branches of banking before consulting with the officers of the institution in which the investigation was to be made.

In reading various bankers' magazines, it was noted that the analysis of checking accounts was a comparatively new phase of cost accounting in banking. Since 90% of the bank's activity is in the checking account department, by far the largest number of people would be affected by any action taken there.

This, apparently, was a live subject which would be interesting to students. An investigation in this field was, therefore, decided upon as it seemed to the writer that it could be comprehended by high school students, and would be worthwhile and profitable in broadening their view of banking.

The next step was to establish a connection with the bank. Here a word of warning is necessary to others attempting like investigations. The teacher should go to the bank or business house, only when the problem is well defined. In this study the problem was in the form of a question, "Are the Charges on Demand Deposits Justified?" Such a definite question or a definite statement should be formulated clearly in the mind of the investigator before approaching the officers of the bank. A city bank is a large institution with hundreds of employees and many departments, and it is obvious that in one investigation all departments cannot be covered. It is necessary, therefore, to limit each investigation of this kind to a problem which can be handled in a reasonable length of time. Other investigations may be made later, but if the problem is clearly defined it is

then possible for the cooperating agency to send the teacher at once to the proper source of material with a minimum loss of effort and time.

In this instance the writer was introduced by one of the officers of the bank to the head of the Analysis Department. The problem was laid before him and without hesitation various records were turned over to help solve the problem.

All forms and supplies needed to aid in the investigation were supplied by the bank. All questions arising during the study were directed to the head of the Analysis Department, but the staff cooperated, explaining each process involved in analysis and aided greatly in showing how the bank attempted to arrive at an equitable charge on demand deposits. The success of the investigation is due in a large measure to this cooperation.

CHAPTER II

DEFINITION OF TERMS

It will help the reader of this paper to have before him a list of terms used, with proper definitions. Such a list follows, herewith:

DEFINITION OF TERMS

Analysis Department

It is the duty of the analysis department to analyze the accounts of the depositors to determine which are profitable and which are losing accounts, and make monthly reports to the officers.

Average Collected Balance

The average collected balance is the amount of loanable funds which the bank has on hand, in a certain account, after deducting the 15% for reserve and any out of town or float items which are uncollected.

Bank Check

A bank check is a written order drawn by a depositor upon his bank to pay a sum of money to a designated party.

Bank Discount

Bank discount is interest paid in advance. Discounting is the process of securing money on commercial paper by payment of interest in advance.

Base Cost

The base cost is the cost of maintaining an account on the books of the bank whether the account is active or not.

Bill of Lading

A bill of lading is an itemized statement of goods shipped, and a contract to transport them safely and make proper delivery at a stated place. The possession of it gives the purchaser, or the person to whom the goods are shipped, a right to receive them.

Capital

The money invested in a business by an individual, firm or company is called capital. It is that part of wealth which is set apart and devoted to the production of more wealth.

Cash

Cash is the bank's most liquid asset. It represents on the books of the bank the amount of currency, coin, and gold held in the bank's vaults.

Certified Checks

By certifying a check the bank gives notice that it has charged the drawer's account and has funds to pay the check on presentation. Certifying a check at

the request of a holder makes it no longer the obligation of the customer who drew, but in fact the obligation of the bank.

Check Book

A check book is a book of blank checks given to the depositor which he may use to draw on his deposit when he pleases.

Checks Deposited

Checks deposited represent the checks received by the customer and deposited to his account.

Checks Paid

Checks paid are the checks issued by the customer.

Clearing House

Generally, an association of bankers, with an office, wherein representatives of its membership banks meet daily and adjust and settle balances of bank accounts with each other.

Clearing House Exchanges

Clearing House Exchanges are items drawn on local banks, members of the clearing house association, which have been deposited or cashed for customers. They are presented through the clearing house for payment and will offset items received from banks that

are members of the clearing house.

Collection Item

A collection item is a general name in banking for a promissory note, draft, or check which a bank holds for collection from another bank, or from an individual.

Commercial Paper

Negotiable instruments calling for the payment of money issued in the course of business, as bills of exchange (drafts), promissory notes etc.

Demand Deposits

The item represents the sum of all the balances, carried by the bank for depositors, payable on demand.

Deposit Tickets

Deposit tickets are the printed forms upon which a depositor in a bank enters the amount of checks, money, etc., to be placed to his credit in the bank.

Draft

A draft is a written order drawn by one party called the drawer on another party called the drawee for the payment of money to a third party called the payee, the amount to be paid from funds which the drawee owes to the drawer.

Earnings

The earnings item is the amount of money earned by the bank in loaning the loanable funds of the bank.

Float

Float is the actual time it takes for a check to get to its destination and the returns to be received.

Interest

Interest is the compensation paid for the use of money.

Loans

1. Demand loans are those payable on demand or call.
2. Time loans are those having a definite maturity.

Overdrafts

When a check is drawn on a bank and there are not sufficient funds to the credit of the drawer (issuer) in the bank to meet it, the check is an overdraft--the drawer of the check has overdrawn his account.

Savings Deposits

These deposits are time deposits for the withdrawal of which notice may be required.

Surplus

Surplus is broadly that which is left over. In finance, the excess of revenues over expenditures.

Transit Checks

Transit checks are checks drawn on out of town banks. They require from two to ten days to convert into available cash or reserve depending upon the place where they are payable. These are also known as "float" or "float items".

Undivided Profits

Undivided profits are those recently accumulated earnings of the bank from which additions to surplus are made and dividends declared. This item represents net profit after dividends.

CHAPTER III

COST ACCOUNTING IN A BANK

Webster's Dictionary describes a bank as "an establishment for the custody, loan, exchange or issue of money as in facilitating the transmission of funds by drafts, checks, etc., discounting, and the like."

In a sense this is a complete definition of a bank and its functions. The difficulty lies in the fact that the average person's knowledge of the bank and banking ends with the definition rather than begins with it. To some a bank is merely a substantial looking building. To others a bank is a set of figures. To still others it is a counting house with a vault where money which is left on deposit accumulates interest in some mysterious way. It is unfortunate that banks and banking are still mysterious terms to the average individual.

What are the real functions of a bank? Henry Ford, in a recent issue of the Commercial and Financial Chronicle tells us in simple, understandable language what a bank should be. He says, in part, "A good bank is never a bonanza. It is never a 'gold mine.' Never a get-rich-quick scheme. A good bank

has as its primary purpose the safe-guarding of its depositors' funds and their use in forwarding the vital functions of industry and commerce. Its success is in promoting the prosperity of its community. The money that it earns is payment for services, not a profit from speculations carried on with other people's money." [1]

That definition takes us back a little in history to the first banks and for what purpose they were established. The story told in the Commercial and Financial Chronicle is that before banks were established people took their valuables to the monasteries and left them with the priests for safekeeping as the monasteries were less likely to be plundered. Upon calling for their precious possessions the owners gave the priests a reward in the form of gifts for taking care of these articles. Some enterprising people saw the possibilities of making a business of safekeeping and the first banks were established. The fundamental idea behind these institutions was the same as that which Mr. Ford states would govern the banks of today; that is, "the safe-guarding of its depositors' funds." These banks expected to be

1. "Essentials of a Sound Banking System" Henry Ford
Commer. & Fin. Chron. 136:2355-6 Apr.8'30

paid for the services they rendered and so today Mr. Ford says "the money it earns is payment for services, not a profit from speculations carried on with other people's money."

As a matter of fact what actually occurs under "riot" or irresponsible banking procedures is that these first principles are forgotten. The purpose becomes primarily to earn large profits. Banking becomes speculative. The goal becomes more and more accounts--quantity rather than quality accounts--for the purpose of gaining more funds for speculation. Competition between banks for accounts becomes very keen. Now competition is healthy when it is not cutthroat, that is, when it does not reduce profits below satisfactory levels. However, the competition carried on by many banks was not healthy but it prospered because it reduced costs to borrowers in the bank. These same borrowers did not realize that while it reduced their banking costs, it also reduced the safety of their funds through weakening the position of the depositaries.[1] Irrational competition of this sort went on until failure of the bank automatically corrected the situation.

1. "Preface to Cost Finding" A.J. Lunn- B. Cl. House 14:12-13 S'30

The responsibility for this unsound economic condition must be placed upon both banker and customer. Upon the banker because he had lost sight of his objectives; stability and productiveness. He had forgotten that his function was to protect the deposits of his customers and to help industry and commerce move their products and services through useful, economical channels. The responsibility rests also upon the customer for being so shortsighted and ignorant of economic principles as to encourage this uneconomic, unsound condition by doing business with a bank which was undermining its very foundation by cutting prices.

When it became more and more apparent to the bankers in 1928 and early in 1929 that their profits were not as large as they had been, due to the reduction in dividend rates on many of their securities, they began to examine carefully for the first time the status of their business. The average merchant had known the cost of operating his business, but the banker had not scrutinized his costs as carefully. He began comparing his business with other businesses, and found it was not unlike them.

He discovered that people paid quite willingly for the services rendered by the public utilities companies while he had been giving away many thousands of dollars in free services every year. He realized, also, that this condition was not the fault of the customer, but was due to poor business judgment on his part. He had offered all of these services free and invited his customers to partake of them without stint.

How was he going to correct this situation? The banker wished to sell services at a profit, but he knew that in order to do this, he must know how much it cost to make a loan, what it cost to produce the checking account service, and the amount of operating expenses of various departments, as well as the cost of handling a transit item. He also had to find out his gross income from earning assets. All this was essential information which he had to obtain before he could set a definite selling price on the various services.

On looking the situation over he found that the bank had certain duties which it had to perform, all of which required capital. The following five items

cover these requirements:-

1. Pay all the expenses of operation.
2. Pay the stockholders a reasonable dividend.
3. Set up reserves for unexpected losses.
4. Compensate officers and employees on the basis of their actual work.
5. Add to surplus for future growth.

To carry out this program, he found he had two main sources of income:-

"1. Income from earning assets.

2. Sale of services at a profit." [1]

He realized that the first of these sources, "Income from earning assets" had really been his main source and that he had done very little or nothing about developing the second. He discovered further that if he could reduce expenses, increase operating efficiency, reduce losses to a minimum and gain new profitable business, he would then increase his profits. Just how to turn these items into profit was still to be discovered. Such discovery called for a complete survey of the following:-

1. An analysis of income and expense to ascertain the cost of every operation in the bank.

1. "Increasing Bank Profits" - W.E. Devlin - Bankers Mag. 124:6257 June '32

2. A complete survey of liabilities and resources.
3. Production research including job and personnel studies.
4. Studies of financial management.
5. Methods of gaining new business.

In making an analysis of income and expense to ascertain the cost of every operation in the bank, the difficulty of allocating the "overhead" expense to the proper department became apparent at once.

The manner in which one bank attacked this problem is interesting and enlightening.

The suggestions included here were not worked out by the bank in which the investigation was carried on, but by a group in another large city bank in the same city. It is included here in full as it will not be found anywhere in print in its entirety, and, therefore, is a desirable record as it gives such a complete picture of the size of the problem which was confronting the banker when he began to delve into costs and their allocation.

"The bugaboo of Overhead is the perplexing problem confronting every banker who delves into the

subject of Bank Costs. It was with the thought of eliminating the complexities prevalent in most cost plans that the method described below was worked out by a group, who are of the opinion that they have cut the Gordian Knot of Overhead and can now present a practical cost system applicable to almost any bank regardless of size.

"In the strictly commercial department of any bank there are two primary sources of earning power, first the capital structure belonging to the shareholders, and second the deposits left with the bank. When a business of any sort is undertaken, those initiating it expect to advance certain funds to furnish a place of business, a capable management and necessary advertising and publicity. That is to say, the shareholders expect to furnish a number of essentials and look to business resulting therefrom for their returns or, putting it in another way, the earning power of the shareholders' money will provide the foundation and good will of the enterprise, while the volume and conduct of business will provide the profit. Applying this theory to a bank, it seems reasonable to assume that many expenses may be charged

to the income from the capital, surplus and undivided profits. For instance, in computing the cost of handling checks it is rather stretching a point to include in that figure any part of the expense of entertainment, advertising, or new business solicitation, since the account is in no way benefiting therefrom and does not require any such expenditures. On the other hand, the nature of the business involves this expense and any bank expects to meet it. Consequently, it is part of the burden of the shareholder in undertaking the business to stand these items and he should pay for them from the return his money earns. If the bank is conducted properly, there will be profits from the deposits handled and it is these profits which are awarded to the owner or shareholder.

"Thus we come to the conclusion that the inoome from the capital structure meets certain expense while the income from the deposit business meets different class of expense leaving a reasonable profit. This method provides the means of arriving at per-item costs which will be absolute, or in other words, eliminates from item costs the general overhead which

at best can only be distributed by estimate.

"The matter of an investment cost or the cost of converting the depositors' money into earning assets has received our careful consideration and study.

"It is axiomatic that a bank must put its deposits to work in order to render banking service to its depositors. Although a savings bank can invest its deposits in securities and long term loans at a minimum of cost, a commercial bank must stand ready at all times to meet the demands of commerce and industry if it is to serve the purpose for which it is founded. The depositor of a commercial bank should realize these facts and therefore would be willing to assume in one way or another the cost of investing his money.

"Most banks that have gone into this subject are applying an investment cost directly against each customer's account in proportion to his balance. We have simplified the application of the investment cost by reducing the gross income from loans and investments by the operating cost of the Loan and Credit Department, plus a reasonable sum to cover normal losses, thus arriving at a lower average yield

rate to be used in computing the income on loanable funds. In justification of this method we would point out that banks usually charge higher rates on loans that give them more work, such as collateral loans, the discounting of a number of small bills receivable, small loans in general that require as much time as the larger ones, and particularly loans that involve greater risks and demand more attention on the part of the officials, and consequently by reducing the gross income in the manner previously stated we obtain an average yield rate that more closely approximates the return on the highest grade commercial loans. Losses are sustained in almost every line of endeavor and as the business man must adjust his prices to cover such eventualities so must the banker take this into consideration in quoting his rates.

"From the foregoing it will be seen that before computing the activity and investment costs it is necessary to go over the expense records and classify as Overhead all expense which cannot be definitely allocated to a particular type of item. This classification will designate as activity costs the

rate to be used in computing the income on loanable funds. In justification of this method we would point out that banks usually charge higher rates on loans that give them more work, such as collateral loans, the discounting of a number of small bills receivable, small loans in general that require as much time as the larger ones, and particularly loans that involve greater risks and demand more attention on the part of the officials, and consequently by reducing the gross income in the manner previously stated we obtain an average yield rate that more closely approximates the return on the highest grade commercial loans. Losses are sustained in almost every line of endeavor and as the business man must adjust his prices to cover such eventualities so must the banker take this into consideration in quoting his rates.

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salaries, rent, supplies, and depreciation on equipment and certain sundry expense of such department as Collection, Coupon, Check Teller, Transit, Bookkeepers, Paying and Receiving Tellers, and Analysis, and as investment costs the same types of expense from the Loan and Credit Departments.

"We have found from the figures of several banks that the total of all this Overhead expense, thus arrived at, is less than the amount earned on Capital, Surplus, and Undivided Profits and so by applying our theory all overhead can be eliminated from the calculations of costs.

"In talking with a customer regarding an analysis of his account the bank can positively assure him, under this plan, that the activity costs are not loaded and he is not paying for high priced furniture in the officers' space, nor for gold leaf on the wall and ceilings, nor for automobiles, advertising, new business solicitation and general administrative officers' salaries and similar expense that are of no benefit to him and in which he is not in the least interested.

"Let us next discuss the manner of arriving at

the activity or direct costs, touching first on the base cost. A bank has a certain number of accounts on its books. For each account it is required to maintain a name on its ledgers, furnish a monthly statement and provide for the deposit and withdrawal of funds. Allowing each account a minimum of activity, say two entries per month, it is found that it would be necessary to have at least one or two bookkeepers, one teller, one statement clerk and one proof clerk, although in a small bank possibly one or two persons could handle all of this minimum activity. This force would require a minimum amount of space and certain equipment. By taking the total expense of this skeleton organization and pro-rating it among all the depositors' accounts we arrive at a base cost for each account.

"Since this theoretical minimum of activity is never actually realized, and additional help, space, equipment and supplies are required to care for the regular volume of business, there arises an activity cost over and above the base cost. This activity cost may be found by figuring the total cost of any one department and deducting the amount used as base

cost in this department. The difference between this total cost and the base cost should then be divided by the number of items above the minimum activity to arrive at the per item activity cost.

"In figuring transit and out-going clearing costs it might be found that some items require more handling than others. For instance, if some items must be run twice, while others need only be listed once, the cost per item should be found by dividing the total cost of the department by the number of listings necessary rather than by the number of items. After this unit cost is found, the per-item cost may be found by multiplying the unit cost by the number of listings required. In figuring the cost of a department only the direct salaries, rent, supplies, depreciation of furniture and equipment and a few special items such as telephone, postage and supper money, should be included.

"Thus to compute costs it becomes necessary to keep an accurate count of items handled in each department every business day of the year. There is a danger that the clerks in some departments might falsify their counts to make it appear that they are

doing more work than the others in the same department and we suggest that all items be counted by one reliable person to avoid the possibility of any padding.

"The salaries should be divided by departments each month thus making them readily available at any time for cost purposes.

"In determining the amount of rent to be charged against the various departments it will first be necessary to figure the area occupied by each department and them make a charge of so much per square foot. Space on the street floor is of course more valuable than second floor or basement space. In computing the space used by the tellers a reasonable amount of public space should be included. In cases where a bank occupies its own building it might be well to have a local real estate man give an estimate of the amount of rent the bank would have to pay for its quarters if the building were owned by another. This charge for rent should be figured to include building maintenance expense, real estate taxes, heat, light and power.

"If the banking quarters are rented the exact

rental cost is known so that only such maintenance expense, heat, light and power as the bank is required to pay need be added to the rental before determining the rental chargeable to each department.

"Supplies should be figured on the cost of such supplies as are requisitioned. A simple way would be to keep a card for each form carried in stock, showing the quantities ordered, the price per item or other unit, and the quantities requisitioned. Each department should fill out a requisition blank for supplies ordered. Space should be provided on these requisitions for the cost per item or per unit, to be taken from the stock card, and the total cost. By pricing the requisition in this way and filing them by department, by months, they will always be available for cost figures.

"Depreciation on equipment and furniture should be calculated on the basis allowed on the federal tax return. A depreciation record must be kept for tax purposes and it is but very little extra work to keep it be departments.

"Telephone costs might best be figured by dividing the total cost by the numbers of instruments.

"It will be necessary to estimate the amount of postage used in sending out transit letters, collections and advices.

"A record of supper money may be kept, by department, in connection with the regular expense analysis book.

"To determine the average earning rates of invested funds, it is suggested that a daily record be kept of the amount of funds invested in loans and securities, either showing the various types separately or bulking them. At the end of any given period the amount of income derived from such sources should be divided by the daily average invested fund to give the average yield. As previously stated, we further reduce this average yield by deducting the operating cost of the Loan and Credit Departments and a reasonable amount to cover normal losses from the gross income on loans and securities.

"After obtaining the base cost of an account and the activity costs of the several kinds of items handled, and charging the Overhead to the income received on the shareholders' money, we come to the question of what return the shareholders should ex-

pect from depositors' funds.

"Many banks figure that they are entitled to a profit of from 1% to 1½% on the average collected balance of each depositor. While this may be accepted fact within the banking fraternity, still there is no reason why the depositor should accept it as a criterion unless the bank can justify the reasonableness of requiring a balance that will allow such a profit.

"The matter might be approached somewhat as follows: Certainly the investor in the shares of the bank hopes for at least 6% on his investment, to be paid either as a dividend or to accumulate with the bank in the surplus account, thus enhancing the value of his holdings. If this were not true the investor might better place his funds in some other business. If we take 6% of the average capital, surplus and undivided profits for the year and divide it by the total average collected deposits for the same period the resulting percentage would indicate what should be a fair return on any account.

"If the ratio of deposits to capital, surplus and undivided profits is 5 to 1, the resulting per-

centage will be 1.2%. At a ratio of 4 to 1, the percentage is 1.5%. Few banks have a stronger ratio than 4 to 1. At a ratio of 6 to 1, the percentage is 1%. In computing the ratio of deposits to capital funds of a bank having a savings department it would be well to ignore the strictly savings accounts and use only the deposits of the commercial department. The reason for this is the savings deposits actually require little or no capital and a bank with a large savings department might find its ratio as high as 10 to 1 if the savings deposits were used in the ratio calculation." [1]

This plan shows the effort made on the part of the banker to arrive at an equitable means of allocating expenses so that the customers of the checking account service would not feel that they were carrying the whole burden of the expense of running the bank.

The various banks throughout the country worked individually on their own problems but the first concerted action came in March of 1929. Mr. Craig B. Hazlewood, President of the American Bankers Association of Chicago, Illinois, called it a "pioneer

1. This plan was given in confidence and was not revealed for general use. For that reason the name of the bank is withheld.

gathering"[1] when he addressed the Conference, because no similar gathering devoted exclusively to the subject of commercial bank management was ever before assembled.

At this conference "The Objective of Sound Commercial Banks" was outlined by Mr. H. N. Stronck, who pointed out that from the point of view of the depositor, stockholder, borrowing customer and personnel, the object is "an ably managed bank."[2] He stated that commercial banking had reached the point where careful study of costs, administration and losses must be the guiding spirit of the administrative officers. He added further that in a recent survey made the indications were that in one year's operations of commercial banks in this country the earnings on the net invested capital were about 4.58 per cent on actual commercial operations, and that one could put one's money in any bond issue and get better returns on it than by operating a commercial bank strictly on a commercial basis.

Upon investigation it was found that the checking account services were costing the banks thousands of dollars, and one banker calls it "the biggest

1. Proceedings-Bank Management Conference 1929-30-31 Vol.1 P. 11
2. " " " " " " " 1 " 15

leak."[1] Any action to place a charge for services on a checking account affects by far the largest number of the bank's depositors. However, the service charge was being advocated more and more by bankers generally and many showed evidence of remarkable gains after having made the charge, but the great question in the minds of many bankers was what a justifiable charge would be.

One bank worked out the following schedule of costs.

COST FIGURES FOR ANALYSIS PURPOSES

Deposit Ticket	$.04
Checks in deposits	.005
Counter Check	.04
Collection Items	.22
Coupons	.005
Certify a check	.14
To make up Payrolls in Envelopes (per envelope)	.006
Cost of Counting Bills (per hour)	.79
Checks Paid through Clearing	.03
Deposits made for account of Correspondent Banks	.07
Issue Cashier's or Other Check	.13
Base Cost	.30

(These costs were given in confidence and taken directly from the bank in which the investigation was made. Therefore, the name of the bank is withheld.)

And this leads us to the analysis of checking accounts, to find out what services are required in

1. "The Biggest Leak Was Plugged" - K.A. Morgan - Am. B. Assn. J. 23:739 F'30.

handling the checking account and what these services actually cost the bank. If the bank has lost money on an account it has not been the fault of the customer. The banks offered services free and the customer accepted them. The bank did not complain and the customer was unaware that another account was probably carrying the burden of his account in the bank. The customer would have been willing to correct the situation had he known that the services rendered him were really a drain upon the bank's assets and would finally result in the failure of the bank.

Checking account costs brought to light by one banker were as follows:-

1. Cost of Equipment - including ledger cards, signature cards, statement forms, bookkeeping machines, filing cabinets and sundry forms.
2. Check books, pass books, deposit slips, check book holders, cost of printing special checks.
3. Approximately 90% of the bank floor space devoted to this service, carrying with it a

like percentage of rent and taxes.

4. Postage for mailing statements, etc.

5. Salaries.

6. Burglary.

7. Loss on Float.

8. Small rate of interest on reserve balances or no interest at all.[1]

There is general agreement that a charge should be made on the checking account for services but how much had not been decided when some banks adopted a flat rate fee; that is, a charge of fifty cents, seventy-five cents, or one dollar per month was made on balances which went below a certain figure set by the bank. The charge and the minimum balance figure varied with the different banks. The injustice of the flat rate charge will be more clearly seen when we actually make an analysis of accounts. The individual is not paying for the services rendered him by the bank but is being penalized for keeping too small an average balance. As a matter of fact analysis has shown that some large accounts which would not have been taxed under this system were really a loss to the bank because of the unusual activity of the

1. "Figuring Checking Account Costs" - J. L. Dart - Bankers Magazine 124-135-8 F'32.

account.

To discover just what the status of some accounts was, one large city bank analyzed some two hundred and fifty accounts in 1931. This bank, like so many others, was not yet convinced of the value of analysis and as a result they analyzed only eighteen accounts in the first seven months of the year, whereas, two hundred and thirty-two accounts were analyzed in the last five months. The increase in the number of accounts analyzed indicates that the bank saw the value of analysis and began to employ it more and more, in its everyday business. No definite procedure was followed in the selection of the accounts but most of them were recommended to the Analysis Department for analysis by various members of the bank staff.

CHAPTER IV

AN ANALYSIS OF CUSTOMERS' ACCOUNTS

In this investigation the writer analyzed the same two hundred and fifty accounts that had been recommended to the bank for analysis. The same procedure was followed as was used by the bank. The same figures were used on "earnings" and the various per-item "costs" and taken directly from accounts. They represent, therefore, the actual condition of two hundred fifty accounts in 1931 before the bank had made any charges for services.

The form on the next page shows the standard form used by the bank for analysis purposes. The writer was supplied with forms enough to carry on the investigation, and was able, therefore, to make out an individual form for each account and give the original data as taken from the bank's record.

The original record of the bank had the customer's name but when making the analysis of the various accounts it was thought best to omit the name since it would add nothing and might cause some adverse criticism.

The month and year were retained in each case, because the various forms, when finally assembled, showed the distribution of accounts analyzed throughout the whole year.

Sample of Form Used In Analysis

Both By the Bank and the Investigator

For This Work.

Analysis of Account Month of *Jan 1931*

Average collected balance *2.*

Earnings on above			5	79
Loss:				
Interest paid				
37 deposits @ 4¢ each	1	48		
2272 checks paid @ 3¢ each	68	16		
1473 checks deposited @ ½¢ each	7	36		
coupons deposited @ ½¢ each				
2 collections @ 22¢ each		44		
base cost		30		
Cost of checks (printing)				
Total cost				
Earnings			77	74
Loss			71	95

The amount of the "average collected balance" is specified on this form as "2.". According to the system used by the bank, this is in reality $2,000. $5,000 is listed as 5. and $14,500 as 14.5. Any amount under $1,000, as for example $200, is listed as .2 and amounts under $100 are written out in full with the dollar sign - for example, $37. to distinguish it from $37,000, which is listed as 37.

The average collected balance is the average amount of loanable funds which the bank had on hand for the entire month, after deducting the 15% reserve and any float items which were uncollected by the end of the month.

The bank is allowed by law to loan only 85% of the average collected balance; 15% is required by law to be set aside as a reserve. The bank further protects itself by deducting the amount of the float items, because float is in the nature of a loan itself. A customer who deposits a check drawn on a bank some distance from the city of deposit, and then immediately draws upon the deposit is really asking the bank to lend him the money until that float item is collected. Some of these float items take from

two to ten days to collect. Under these circumstances, it will be readily seen that the bank must make some provision on its records to deduct these items from loanable funds. We shall see later that bankers have concluded that, if these out of town items are to be handled, they must be compensated for by the customer at the rate of a regular loan. That is, they would require the customer to pay interest at the rate of 6% per annum for the time it takes to collect an item on the basis that it is really a loan by the local bank to the customer until the item has been collected.

"Earnings on Above" is the amount of income it was possible for the bank to earn on the invested $2000 average collected balance. The earnings for the month of January on this particular account were $5.79.

It will be noted on this form that "interest paid" shows no item of interest having been paid. At this time it was the custom of the bank to pay interest only on checking accounts which showed a profit, but since this slip shows a considerable loss, no interest was paid. This item would not appear on any

account at the present time as the Bank Act of 1933, passed by Congress and signed by the President on June 16, prohibited the payment of interest on demand deposits. The notice sent out by a Boston bank follows:

June 21, 1933.

To Our Depositors:

The Bank Act of 1933 recently passed by Congress and signed by the President on June 16 provides in part as follows:

> "No member bank shall directly or indirectly by any device whatsoever pay any interest on any deposit which is payable on demand."

We regret therefore to advise you that under the terms of this Act we are obliged to discontinue the payment of interest on all demand deposit accounts effective on and after June 16, 1933.

"Deposits" is the number of actual individual deposits made at the bank. The figure "37" is arrived at by counting the total number of deposit slips in the name of this one customer, for a period of one month. The bank has discovered through cost accounting that it costs approximately 4¢ to handle each deposit slip that comes through the window of the bank teller.

The figure "2272" on "checks paid" is the total number of checks issued by the customer and returned to the bank for payment, in any one month. The cost of handling each such item is approximately 3¢, according to the bank.

"Checks deposited" represents the number of checks received by the customer, the receipts from which were deposited to his account. The figure "1473" is the number of checks deposited on all deposit tickets made out by the customer. The cost of each such item is ½¢ each.

"Coupons", of which there were none in this account, represents the coupons clipped from bonds by customers and deposited with the bank for collection. The cost per item here as shown is ½¢ each.

"Collections" are those items which, for some reason or other, the bank will not accept as cash. If there is any question whether a check or draft will be honored, the bank puts it through for "collection." This procedure is usually taken at the request of the customer and means that the funds will not be credited to the account of the customer until they have been received at the bank of deposit. For

the extra handling there is a cost to the bank of approximately 22¢ on each item.

"Base Cost" is a fixed charge of 30¢ on each account. It is assumed by the bank that it costs at least 1¢ a day to carry an account whether or not it is active. This item is also known as a "maintenance" cost.

"Cost of Checks (Printing)" represents an attempt on the part of the bank to allocate the expense of certain kinds of printing to the checking account, and in particular to the account incurring the expense. It will be noted there is no amount charged on this sample form, as the scheme had not been thoroughly enough worked out at this time to permit application. It was, however, put into practice before the end of the year along the following lines:

A per-item cost was worked out from the printer's bill. The total cost of each classification of printing--checks, deposit slips, pass books, signature cards, etc.--was divided by the total number of items in each class, to find the cost per item. As the checks, deposit slips, etc. were returned to the bank for handling in the regular routine of business, the

cost on a per item basis was charged as a loss against the customer's account. This explanation is given, even though there was no charge on this form, because such items do appear on the summary sheets which follow.

If the account were profitable to the bank, the total cost of activity and maintenance would be smaller than the earnings on the average collected balance. On this sample the total cost is much larger than the earnings on the average collected balance and, therefore, it represents a loss to the bank. The word "loss" was not printed on the analysis sheet and had to be written in. The bank, evidently, was over-optimistic.

The charts which follow in the next few pages show a summary of the accounts analyzed according to the months in which the analysis was made. Full details are given regarding each account. These details were transferred from the original two hundred and fifty analysis sheets to make it easier to follow the information secured. An attempt has been made to set up in a unified form all of the details to facilitate their handling for further analysis. It would

be necessary for a teacher or student intending to make use of the data for classroom work to have such details of the data as are given here. Individual analysis of accounts and comparisons of profitable and unprofitable accounts would be impossible without such information. Therefore, the tables are most essential.

ACCOUNTS ANALYZED
FOR THE MONTHS OF
JANUARY, FEBRUARY, MARCH, APRIL, MAY AND JUNE
1931.

Av. Col. Balance	Earnings	Service Charge	Interest Paid	Deposits @ 4¢ ea. No.	Deposits Cost	Checks pd. @ 3¢ ea. No.	Checks pd. Cost	Checks dep. @ ½¢ ea. No.	Checks dep. Cost	Coupons @ ½¢ ea. No.	Coupons Cost	Collections @ 22¢ No.	Collections Cost	Base Cost	Cost of Printing	Total Cost	Profit	Loss
JANUARY																		
$ 2,000	$ 5.79			37	$1.48	2272	$68.16	1473	$7.36			2	$ .44	$ .30		$77.74		$71.95
2,000	5.79			19	.76	1840	55.20	39	.20					.30		56.46		50.67
1,300	2.87		.15	10	.40	56	1.68	47	.24					.30		2.77	$ .10	
$ 5,300	$14.45		$ .15	66	$2.64	4168	$125.04	1559	$7.80			2	$ .44	$ .90		$136.97	$ .10	$122.62
FEBRUARY																		
$ 1,300	$ 3.45			27	$1.08	872	$26.16	864	$4.32			5	$1.10	$ .30		$ 32.96		$ 29.48
1,400	3.75			7	.28	660	19.80	7	.04					.30		20.42		16.67
$ 2,700	$ 7.23			34	$1.36	1532	$45.96	871	$4.36			5	$1.10	$ .60		$ 53.38		$ 46.15
MARCH																		
$ 1,100	$ 3.10			28	$1.12	726	$21.78	766	$3.83			3	$ .66	$ .30		$ 27.69		$ 24.59
1,300	3.66			4	.16	571	17.13	4	.02					.30		17.61		13.95
6,000	15.62			31	1.24	401	12.03	478	2.39			2	.44	.30		16.40		.78
$ 8,400	$22.38			63	$2.54	1698	$50.94	1248	$6.24			5	$1.10	$ .90		$ 61.70		$ 39.32
APRIL																		
$ 800	$ 2.03			3	$ .12	454	$13.62	3	$ .02					$ .30		$ 14.06		$ 12.03
2,900	7.35			27	1.08	400	12.00	602	3.01			4	$ .88	.30		17.27		9.92
$ 3,700	$ 9.38			30	$1.20	854	$25.62	605	$3.03			4	$ .88	$ .60		$ 31.33		$ 21.95
MAY																		
$ 5,100	$13.28			4	$ .16	504	$15.12	4	$ .02					$ .30		$ 15.60		$ 2.32
46,300	126.93		$38.10	21	.84	105	3.15	111	.57					.30	$ .53	43.49	$83.44	
$51.400	$140.21		$38.10	25	$1.00	609	$18.27	117	$ .59					$ .60	$ .53	$ 59.09	$83.44	$ 2.32
JUNE																		
$ 5,600	$ 13.96			23	$ .92	706	$21.18	446	$2.23			1	$ .22	$ .30		$ 24.85		$ 10.89
5,700	14.20			2	.08	1218	36.54	2	.01					.30		36.93		22.73
$11,300	$ 28.16			25	$1100	1924	$57.72	448	$2.24			1	$ .22	$ .60		$ 61.78		$ 33.62

ACCOUNTS ANALYZED FOR THE
MONTH OF JULY
1931.

Av. Col. Balance	Earnings	Service Charge	Interest paid	Deposits @ 4¢ ea. No.	Deposits Cost	Checks pd. @ 3¢ ea. No.	Checks pd. Cost	Checks dep. @ ½¢ ea. No.	Checks dep. Cost	Coupons @ ½¢ ea. No.	Coupons Cost	Collections @ 22¢ No.	Collections Cost	Base Cost	Cost of Printing	Total Cost	Profit	Loss
$ 700	$1.82			2	$ .08	16	$ .48	15	$ .08					$ .30	$ .14	$1.08	$ .74	
1500	3.86			27	1.08	409	12.27	401	2.00			3	$ .66	.30	[illegible]	16.31		$12.45
1600	4.12			4	.16	381	11.43	4	.02					.30	[illegible]	11.91		7.79
2800	7.28			27	1.08	129	3.87	126	.63			26	5.72	.30	1.03	12.63		5.35
$6600	$17.08			60	$2.40	935	$28.05	546	$2.73			29	$6.38	$1.20	$1.17	$41.93	$ .74	$25.59

ACCOUNTS ANALYZED FOR THE
MONTH OF AUGUST
1931.

Av. Col. Balance	Earnings	Service Charge	Interest paid	Deposits @ 4¢ ea. No.	Deposits Cost	Checks pd. @ 3¢ ea. No.	Checks pd. Cost	Checks dep. @ ½¢ ea. No.	Checks dep. Cost	Coupons @ ½¢ ea. No.	Coupons Cost	Collections @ 22¢ No.	Collections Cost	Base Cost	Cost of Printing	Total Cost	Profit	Loss
$ 200	$ .51			4	$ .16	91	$ 2.73	4	$ .02					$ .30	$ .82	$ 4.03		$ 3.52
400	1.02			11	.44	26	.78	1	.01					.30	.15	1.68		.66
500	1.27			18	.72	58	1.74	67	.34			1	$ .22	.30	.51	3.83		2.56
700	1.79			1	.04	24	.72	1	.01					.30		1.07	$ .72	
800	2.04			23	.92	20	.60	43	.22					.30	.18	2.22		.18
800	2.04			3	.12	30	.90	7	.04					.30	.23	1.59	.45	
900	2.30			13	.52	80	2.40	19	.10					.30	.72	4.04		1.74
1,100	2.81			6	.24	485	14.55	6	.03					.30		15.12		12.31
1,200	3.06		$ .05	11	.44	96	2.88	49	.25					.30		3.92		.86
1,300	3.32		.11			24	.72							.30	.20	1.33	1.99	
1,500	3.83			26	1.04	200	6.00	1291	6.46			1	.22	.30	11.62	25.64		21.81
1,600	4.08		.24	5	.20	12	.36	13	.07					.30		1.17	2.91	
1,700	4.34		.27	2	.08	4	.12	2	.01					.30	.18	.96	3.38	
1,800	4.59			3	.12	28	.84	3	.02					.30	.25	1.53	3.06	
2,000	5.10			29	1.16	173	5.19	144	.72			1	.22	.30		7.59		2.49
2,000	5.10		.42	7	.28	48	1.44	16	.08					.30	.36	2.88	2.22	
2,200	5.61		.50	26	1.04	72	2.16	574	2.87			22	4.84	.30	.40	12.11		6.50
2,600	6.64		.66	11	.44	47	1.41	102	.51					.30	.28	3.60	3.04	
2,700	6.89		.70			12	.36							.30	.06	1.42	5.47	
3,000	7.66			22	.88	454	13.62	411	2.06			1	.22	.30		17.08		9.42
3,600	9.19			51	2.04	186	5.58	130	.65			29	6.38	.30	1.51	16.46		7.27
4,300	10.97		1.42	6	.24	47	1.41	17	.09					.30	.35	3.81	7.16	
4,400	11.23		1.43	10	.40	21	.63	11	.06					.30	.19	3.01	8.22	
6,000	15.31		2.10	18	.72	561	16.83	643	3.22					.30	2.69	25.86		10.55
7,000	17.87		2.80	2	.08	20	.60	8	.04					.30	.15	3.97	13.90	
7,000	17.87		2.53	7	.28	420	12.60	9	.05					.30		15.76	2.11	
16,400	41.86			25	1.00	39	1.17	82	.41					.30	.35	3.23	38.63	
43,400	110.77		18.43	3	.12	10	.30	4	.02					.30	.13	19.30	91.47	
69,700	177.89		29.56	23	.92	20	.60	24	.12					.30	.65	32.15	145.74	
$190,800	$486.96		$61.22	366	$14.64	3308	$99.24	3680	$18.48			55	$12.10	$ 8.70	$21.98	$236.36	$330.47	$79.87

ACCOUNTS ANALYZED FOR THE
MONTH OF SEPTEMBER
1931.

Av. Col. Balance	Earnings	Service Charge	Interest Paid	Deposits @ 4¢ ea. No.	Deposits Cost	Checks pd. @ 3¢ ea. No.	Checks pd. Cost	Checks dep. @ ½¢ ea. No.	Checks dep. Cost	Coupons @ ½¢ ea. No.	Coupons Cost	Collections @ 22¢ No.	Collections Cost	Base Cost	Cost of Printing	Total Cost	Profit	Loss
$ 200.	$ .51	$1.00		13	$ .52	29	$ .87	41	$ .20					$ .30	$ .26	$ 2.15		$ .64
400.	1.02			1	.04	7	.21	1	.01					.30	.02	.58	$ .44	
700.	1.79			6	.24	56	1.68	9	.04					.30	.55	2.81		1.02
700.	1.78			1	.04	4	.12							.30	.04	.50	1.29	
900.	2.30			15	.60	76	2.28	16	.08					.30	.68	3.94		1.64
1,000.	2.55			15	.60	75	2.25	89	.45					.30		3.60		1.05
1,100.	2.81		$ .05	15	.60	71	2.13	121	.61			2	$ .44	.30	.60	4.73		1.92
1,100.	2.81		.05	2	.08	40	1.20	2	.01					.30	.98	2.62	.19	
1,200.	3.06		.07	6	.24	68	2.04	83	.42			1	.22	.30	.33	3.62		.56
1,500.	3.83			9	.36	7	.21	41	.20					.30	.06	1.13	2.70	
1,800.	4.60		.33	20	.80	20	.60	50	.25					.30	.18	2.46	2.14	
1,800.	4.60			5	.20	15	.45	34	.17					.30	.13	1.25	3.35	
1,900.	4.85			6	.24	104	3.12	10	.05					.30	.63	4.34	.51	
1,900.	4.85			6	.24	992	29.76	6	.03					.30		30.33		25.48
1,900.	4.85			24	.96	176	5.28	55	.27					.30	1.28	8.09		3.24
2,000.	5.11		.04	6	.24	35	1.05	22	.11					.30	.30	2.04	3.07	
2,100.	5.36			27	1.08	313	9.39	640	3.20			1	.22	.30		14.19		8.83
2,200.	5.62			10	.40	44	1.32	11	.05					.30	.24	2.31	3.31	
2,600.	6.64			26	1.04	110	3.30	1486	7.43					.30	2.09	14.16		7.52
2,800.	7.15		.76	2	.08	21	.63	12	.06					.30	.07	1.90	5.25	
3,100.	7.92			26	1.04	25	.75	1198	5.99					.30		8.08		.16
3,600.	9.19		1.08	24	.96	180	5.40	531	2.65					.30	1.12	11.51		2.32
5,900.	15.07			25	1.00	911	27.33	1173	5.86			1	.22	.30		34.71		19.64
6,200.	15.83			7	.28	21	.63	17	.08					.30	.11	1.40	14.43	
7,100.	18.13		2.50	6	.24	212	6.36	6	.03					.30	2.12	11.55	6.58	
8,200.	20.94			23	.92	521	15.63	1253	6.26					.30		23.11		2.17
17,100.	43.66		7.01	22	.88	34	1.02	68	.34					.30	.31	9.86	33.80	
$81,000.	$206.84	$1.00	$11.89	348	$13.92	4167	$125.01	6975	$34.85			5	$1.10	$8.10	$12.10	$206.97	$77.06	$76.19

ACCOUNTS ANALYZED FOR THE
MONTH OF OCTOBER
1931.

Av. Col. Balance	Earnings	Service Charge	Interest paid	Deposits @ 4¢ ea. No.	Deposits Cost	Checks pd. @ 3¢ ea. No.	Checks pd. Cost	Checks dep. @ ½¢ ea. No.	Checks dep. Cost	Coupons @ ½¢ ea. No.	Coupons Cost	Collections @ 22¢ No.	Collections Cost	Base Cost	Cost of Printing	Total Cost	Profit	Loss
$ 300	$ .73			6	$ .24	62	$ 1.86	11	$ .06					$ .30	$ .53	$ 2.99		$ 2.26
300	.73			2	.08	39	1.17	15	.08					.30	.37	2.00		1.27
500	1.22			14	.56	45	1.35	37	.19					.30		2.40		1.18
600	1.47			1	.04	9	.27	1	.01					.30	.08	.70	$ .77	
700	1.71			14	.56	53	1.59	63	.32					.30		2.77		1.06
800	1.96			2	.08	22	.66	2	.01					.30		1.05	.91	
800	1.96			11	.44	44	1.32	69	.35					.30	.39	2.80		.84
1000	2.45			11	.44	47	1.41	71	.36					.30	.28	2.79		.34
1100	2.69		$ .05	25	1.00	93	2.79	210	1.05					.30	.61	5.80		3.11
1200	2.94		.11	6	.24	64	1.92	79	.40					.30	.43	3.40		.46
1200	2.94			31	1.24	232	6.96	1154	5.77					.30	2.44	16.71		13.77
1300	3.18		.16	20	.80	76	2.28	69	.35					.30	.55	4.44		1.26
1300	3.19		.16	1	.04	10	.30	1	.01					.30	.30	1.11	2.08	
1600	3.92		.30	14	.56	106	3.18	16	.08					.30	.95	5.37		1.45
1700	4.16		.38	23	.92	80	2.40	150	.75					.30	.70	5.45		1.29
1900	4.66		.33	4	.16	40	1.20	111	.56					.30	.22	2.77	1.89	
2200	5.39		1.34	4	.16	3	.09	56	.28					.30		2.17	3.22	
2300	5.64		.85	9	.36	50	1.50	85	.43					.30	.33	3.77	1.87	
2300	5.63		.71	17	.68	104	3.12	34	.17					.30	.68	5.66		.03
2500	6.12			26	1.04	150	4.50	102	.51					.30		6.35		.23
2500	6.12			32	1.28	1098	32.94	1670	8.35	3	$ .02			.30		42.89		36.77
2700	6.61			25	1.00	29	.87	1278	6.39					.30		8.56		1.95
3300	8.08			14	.56	1002	30.06	18	.09					.30		31.01		22.93
3400	8.33		1.37	16	.64	57	1.71	114	.57					.30	.48	5.07	3.26	
3500	8.57			27	1.08	268	8.04	1434	7.17					.30	5.09	21.68		13.11
3900	9.55			26	1.04	83	2.49	372	1.86	4	.02			.30	.75	6.46	3.09	
4100	10.05		1.51	3	.12	90	2.70	7	.04					.30	.79	5.46	4.59	
4100	10.05		1.84	1	.04	46	1.38	1	.01					.30	.40	3.97	6.08	
4300	10.53			1	.04	9	.27	1	.01					.30		.62	9.91	
4400	10.78		1.97	22	.88	265	7.95	50	.25					.30		11.35		.57
4700	11.51		2.08	15	.60	126	3.78	102	.51					.30	.69	7.96	3.55	
4900	12.00		2.49	3	.12	17	.51	5	.03					.30	.15	3.60	8.40	
5100	12.50													.30		.30	12.20	
5100	12.50			26	1.04	220	6.60	383	1.92					.30	1.10	10.96	1.54	
6100	14.95		3.09	29	1.16	300	9.00	277	1.39			8	$1.76	.30	3.00	19.70		4.75
7300	17.88			30	1.20	131	3.93	98	.49	14	.07			.30	1.05	7.04	10.84	
7600	18.62		3.67	14	.56	33	.99	28	.14					.30		5.66	12.96	
11000	26,95		7.20	2	.08	5	.15	9	.05					.30		7.78	19.17	
11500	28.18		6.84	2	.08	26	.78	2	.01					.30	.13	8.14	20.04	
13500	33.08		8.08	13	.52	90	2.70	469	2.34			2	.44	.30	.86	15.25	17.84	
13600	33.32			2	.08	12	.36	78	.39					.30		1.13	32.19	

ACCOUNTS ANALYZED FOR THE
MONTH OF OCTOBER
1931.

Av. Col. Balance	Earnings	Service Charge	Interest Paid	Deposits @ 4¢ ea. No.	Deposits Cost	Checks pd. @ 3¢ ea. No.	Checks pd. Cost	Checks dep. @ ½¢ ea. No.	Checks dep. Cost	Coupons @ ½¢ ea. No.	Coupons Cost	Collect-ions @ 22¢ No.	Collections Cost	Base Cost	Cost of Print-ing	Total Cost	Profit	Loss
$ 17,700	$ 43.36		$ 10.38	7	$ .28	100	$ 3.00	259	$ 1.30					$ .30		$ 15.26	$28.10	
17,900	43.86		19.39	13	.52	16	.48	18	.09					.30	$ .14	20.92	22.94	
19,300	47.29		11.42	1	.04	30	.90	4	.02					.30	.36	13.04	34.25	
20,900	51.20		11.56	3	.12	8	.24	9	.05					.30	.16	12.43	38.77	
21,000	53.65		1.64	25	1.00	44	1.32	114	.57					.30	.29	5.12	48.53	
22,500	55.13			3	.12	24	.72	65	.33					.30	.19	1.66	53.47	
22,800	55.86		13.64	29	1.16	141	4.23	158	.79					.30	2.26	22.38	33.48	
23,300	57.09		16.00	26	1.04	88	2.64	1086	5.43			1	$ .22	.30	.55	26.18	30.91	
24,800	60.76		15.28	26	1.04	120	3.60	366	1.83			1	.22	.30	3.72	25.99	34.77	
25,400	62.23		14.48	17	.68	265	7.95	90	.45	25	$ .13			.30	1.91	25.90	36.33	
28,700	70.32		17.42	17	.68	5	.15	96	.48					.30	.03	19.06	51.26	
30,600	74.97		1.15			100	3.00							.30	.85	5.30	69.67	
32,600	79.87		19.39	4	.16	30	.90	20	.10			1	.22	.30	.78	21.85	58.02	
33,000	80.85		23.72	14	.56	51	1.53	27	.14					.30	.28	26.53	54.32	
33,900	83.06		19.56	15	.60	336	10.08	361	1.81			1	.22	.30		32.57	50.49	
34,000	83.30		18.79	10	.40	12	.36	43	.22					.30		20.07	63.23	
36,100	88.45			20	.80	225	6.75	75	.38			25	5.50	.30		13.72	74.72	
38,800	95.06		20.24	3	.12	111	3.33	2	.01					.30		24.00	71.06	
39,800	97.51			6	.24	44	1.32	5	.03					.30	.37	2.26	95.25	
56,900	139.40			5	.20	47	1.41	14	.07					.30	.33	2.31	137.09	
134,900	330.50		83.92	22	.88	200	6.00	52	.26					.30	1.32	92.68	237.82	
219,300	537.29		221.05	2	.08	9	.27	2	.01					.30		221.71	315.58	
290,600	711.97		200.54	24	.96	100	3.00	73	.37	1	.01			.30		205.18	506.79	
307,600	753.62		315.42	4	.16	102	3.06	4	.02					.30		318.96	434.66	
$1,684,600	$4,129.45		$1,099.52	840	$33.60	7444	$223.32	11675	$58.51	47	$ .25	39	$8.58	$19.50	$36.89	$1,480.17	$2,757.91	$108.63

ACCOUNTS ANALYZED FOR THE
MONTH OF NOVEMBER
1931.

Av. Col. Balance	Earnings	Service Charge	Interest Paid	Deposits @ 4¢ ea. No.	Cost	Checks pd. @ 3¢ ea. No.	Cost	Checks dep. @ $\frac{1}{2}$¢ ea. No.	Cost	Coupons @ $\frac{1}{2}$¢ ea. No.	Cost	Collections @ 22¢ No.	Cost	Base Cost	Cost of Printing	Total Cost	Profit	Loss
$ 200	$ .55			18	$ .72	22	$ .66	69	$ .35					$.30	$ .19	$ 2.22		$ 1.67
200	.55			1	.04	32	.96	8	.04					.30	.30	1.64		1.09
300	.82	$1.00		15	.60	42	1.26	1	.01					.30		2.17		.35
300	.82													.30		.30	$ .52	
300	.82			15	.60	29	.87	45	.23					.30	.58	2.58		1.76
400	1.10			1	.04	47	1.41	1	.01					.30		1.76		.66
400	1.10			3	.12	26	.78	4	.02					.30	.18	1.40		.30
500	1.37			11	.44	43	1.29	64	.32					.30	.38	2.73		1.36
500	1.37													.30		.30	1.07	
600	1.64			20	.80	42	1.26	97	.49					.30	.23	3.08		1.44
600	1.64			13	.52	66	1.98	30	.15					.30	.56	3.51		1.87
700	1.91			13	.52	170	5.10	13	.07					.30		5.99		4.08
700	1.92			30	1.20	188	5.64	1110	5.55					.30	1.97	14.66		12.74
700	1.92			11	.44	55	1.65	54	.27					.30	.36	3.02		1.10
800	2.19			11	.44	11	.33	26	.13					.30	.10	1.30	.89	
900	2.47			6	.24	26	.78	76	.38					.30	.22	1.92	.55	
900	2.47			25	1.00	17	.51	41	.21					.30	.08	2.10	.37	
900	2.47			5	.20	17	.51	33	.17					.30	.14	1.32	1.15	
1000	2.74			4	.16	65	1.95	81	.41					.30	.32	3.14		.40
1000	2.74		$ .05	23	.92	63	1.89	229	1.15					.30	.42	4.73		1.99
1000	2.74		.05	12	.48	103	3.09	15	.08					.30	.93	4.93		2.19
1100	2.70			27	1.08	269	8.07	713	3.57					.30		13.02		10.32
1100	3.01			7	.28	72	2.16	10	.05					.30	.47	3.26		.25
1200	3.29		.19	3	.12	4	.12	21	.11					.30	.02	.86	2.43	
1300	3.56		.25	15	.60	45	1.35	113	.57					.30	.29	3.36	.20	
1400	3.84		.33	22	.88	24	.72	83	.42					.30	.22	2.87	.97	
1900	5.21					1109	33.27							.30		33.57		28.36
2000	5.48			8	.32	54	1.62	56	.28					.30	1.08	3.60	1.88	
2100	5.76			27	1.08	1047	31.41	1507	7.54			4	$ .88	.30		41.21		35.45
2100	5.76		.90											.30		1.20	4.56	
2500	6.85			23	.92	95	2.85	99	.50					.30		4.57	2.28	
2500	6.85			23	.92	26	.78	1213	6.07					.30		8.07		1.22
2700	7.40		1.40	22	.88	99	2.97	151	.76			1	.22	.30	.84	7.37	.03	
3000	8.22			16	.64	202	6.06	980	4.90			8	1.76	.30		13.66		5.44
3000	8.22		1.67	25	1.00	108	3.24	40	.20	5	$ .03			.30	.70	7.14	1.08	
3300	9.05		1.92	12	.48	30	.90	53	.27					.30	.19	4.06	4.99	
3400	9.32		1.97	16	.64	40	1.20	58	.29					.30	.29	4.69	4.63	
3500	9.59			8	.32	44	1.32	51	.26					.30	.24	2.44	7.15	
3800	10.42		2.30	7	.28	41	1.23	29	.15	11	.06			.30	.36	4.68	5.74	
3900	10.69		2.38	4	.16	2	.06	5	.03					.30		2.93	7.76	
3900	10.69			29	1.16	137	4.11	96	.48			25	5.50	.30	1.10	12.65		1.96

ACCOUNTS ANALYZED FOR THE
MONTH OF NOVEMBER
1931.

Av. Col. Balance	Earnings	Service Charge	Interest Paid	Deposits @ 4¢ ea. No.	Deposits Cost	Checks pd. @ 3¢ ea. No.	Checks pd. Cost	Checks dep. @ ½¢ ea. No.	Checks dep. Cost	Coupons @ ½¢ ea. No.	Coupons Cost	Collections @ 22¢ No.	Collections Cost	Base Cost	Cost of Printing	Total Cost	Profit	Loss
$ 4,100	$ 11.24			4	$ .16	1140	$ 34.20	6	$ .03					$ .30	$	$ 34.69		$ 23.45
4,200	11.51			24	.96	220	6.60	1353	6.77					.30	4.18	18.81		7.30
4,300	11.79		$ 2.71	1	.04	30	.90	1	.01					.30	.16	4.12	$ 7.67	
5,400	14.80		3.63	2	.08	72	2.16	2	.01					.30	1.30	7.48	7.32	
5,700	15.62		3.89	23	.92	70	2.10	148	.74			2	$ .44	.30	.63	9.02	6.60	
6,000	16.45		4.11	5	.20	281	8.43	5	.03					.30	2.81	15.88	.57	
6,200	17.00		4.24	7	.28	1	.03	24	.12					.30		4.97	12.03	
6,700	18.37		4.68	7	.28	627	18.81	11	.06					.30		24.13		5.76
7,000	19.19		4.90	2	.08	19	.57	10	.05					.30		5.90	13.29	
7,600	20.83		5.42	23	.92	88	2.64	726	3.63					.30	.55	13.46	7.37	
14,900	40.85			5	.20	2	.06	5	.03					.30	.01	.60	40.25	
16,600	45.51		13.69	5	.20	135	4.05	5	.03					.30	.34	18.61	26.90	
21,000	57.57		17.31	42	1.68	125	3.75	516	2.58			4	.88	.30	1.06	27.56	30.01	
21,000	57.57		17.26	14	.56	5	.15	27	.14					.30	.10	18.51	39.06	
22,300	61.13		18.35	6	.24	11	.33	6	.03					.30	.23	19.48	41.65	
28,100	77.03			1	.04	1	.03	1	.01					.30	.01	.39	76.64	
31,700	86.90		17.89	6	.24	29	.87	6	.03					.30	.60	19.93	66.97	
35,300	96.77		23.53	21	.84	20	.60	59	.30					.30	.40	25.97	70.80	
39,000	106.91		32.05			145	4.35							.30	.	36.70	70.21	
40,300	98.74		27.37	13	.52	8	.24	24	.12					.30		28.55	70.19	
42,700	117.06		35.09	23	.92	13	.39	26	.13					.30	.42	37.25	79.81	
47,200	129.39		38.82	22	.88	28	.84	98	.49					.30	.25	41.58	87.81	
90,600	248.37		74.49	23	.92	300	9.00	611	3.06					.30	2.28	90.05	158.32	
160,900	441.09		124.08	1	.04	45	1.35	1	.01					.30		125.78	315.31	
1,603,900	4,396.93		2,636.61	3	.12	10	.30	4	.02					.30		2,637.35	1,759.58	
$2,335,300	$6,389.88	$1.00	$3,123.53	814	$32.56	7937	$238.11	10950	$ 54.92	16	$ .09	44	$ 9.68	$19.80	$28.09	$3,506.78	$3,036.61	$152.51

ACCOUNTS ANALYZED FOR THE
MONTH OF DECEMBER
1931.

Av. Col. Balance	Earnings	Service Charge	Interest Paid	Deposits @ 4¢ ea. No.	Deposits Cost	Checks pd. @ 3¢ ea. No.	Checks pd. Cost	Checks dep. @ $\frac{1}{2}$¢ ea. No.	Checks dep. Cost	Coupons @ $\frac{1}{2}$¢ ea. No.	Coupons Cost	Collect-ions @ 22¢ No.	Collections Cost	Base Cost	Cost of Print-ing	Total Cost	Profit	Loss
$ .37	$ .10													$ .30		$ .30		$ .20
50	.14	$1.00		4	$ .16	13	$ .39	5	$ .03					.30		.88		.62
100	.28	1.00		2	.08	38	1.14	14	.07					.30	$ .36	1.95		.67
200	.49	1.00		13	.52	34	1.02							.30	.17	2.01		.52
200	.56	1.00		15	.60	54	1.62	71	.36					.30	.48	3.36		1.80
250	.56			28	1.12	22	.66	40	.20					.30	.10	2.38		1.82
300	.83			9	.36	18	.54	8	.04					.30	.13	1.37		.54
400	1.11			14	.56	94	2.82	16	.08					.30	.85	4.61		3.50
500	1.39			22	.88	40	1.20							.30		2.38		.99
500	1.39			11	.44	43	1.29	66	.33					.30		2.36		.97
500	1.39			14	.56	74	2.22	28	.14					.30	.63	3.85		2.46
600	1.67			18	.72	180	5.40	20	.10					.30		6.52		4.85
600	1.67			1	.04	50	1.50	1	.01					.30		1.85		.18
700	1.95			25	1.00	77	2.31	189	.95					.30	.38	4.94		2.99
700	1.95			1	.04	3	.09	3	.02					.30	.03	.48	$ 1.47	
800	2.22			7	.28	15	.45	11	.06					.30		1.09	1.13	
900	2.50			18	.72	34	1.02	79	.40					.30		2.44	.06	
1,000	2.78			8	.32	80	2.40	50	.25					.30	.54	3.81		1.03
1,000	2.78			4	.16	22	.66	4	.02					.30	.19	1.33	1.45	
1,000	2.78			27	1.08	35	1.05	97	.49					.30	.42	3.34		.56
1,100	3.06			27	1.08	125	3.75	131	.65					.30		5.78		2.72
1,200	3.33		$ .22			4	.12							.30	.02	.66	2.67	
1,300	3.61		.27	5	.20	40	1.20	18	.09					.30		2.06	1.55	
1,300	3.61		.22	18	.72	3	.09	40	.20					.30	.03	1.56	2.05	
1,300	3.84		.13	6	.24	16	.48	24	.12					.30		1.27	2.57	
1,500	4.17		.44	23	.92	74	2.22	175	.88					.30	.63	5.39		1.22
1,600	4.45			36	1.44	205	6.15	1163	5.82					.30	2.15	15.86		11.41
1,700	4.72			8	.32	956	28.68	11	.06					.30		29.36		24.64
1,800	5.00			7	.28	25	.75	13	.07					.30	.21	1.61	3.39	
1,800	5.00		.68	16	.64	15	.45	144	.72			2	$ .44	.30	.06	3.29	1.71	
1,800	5.00					1193	35.79							.30		36.09		31.09
1,900	5.28		1.56	26	1.04	176	5.28	794	3.97			1	.22	.30	2.06	14.43		9.15
2,000	5.56		.82	3	.12	180	5.40	3	.02					.30	2.97	9.63		4.07
2,100	5.84			12	.48	116	3.48	5	.03					.30	.20	4.49	1.35	
2,500	6.95			29	1.16	384	11.52	652	3.26			2	.44	.30		16.68		9.73
2,800	7.78		1.51	4	.16	15	.45	6	.03					.30	.10	2.55	5.23	
3,000	8.34		1.64	18	.72	282	8.46	54	.27					.30	1.41	12.80		4.46
3,000	8.34			21	.84	232	6.96	965	4.88			2	.44	.30		13.42		5.08
3,900	10.84			30	1.20	169	5.07	95	.48			26	5.72	.30		12.77		1.93
4,400	12.23			38	1.52	200	6.00	1415	7.08			3	.66	.30	3.80	19.36		7.13

ACCOUNTS ANALYZED FOR THE
MONTH OF DECEMBER
1931.

Av. Col. Balance	Earnings	Service Charge	Interest Paid	Deposits @ 4¢ ea. No.	Deposits Cost	Checks pd. @ 3¢ ea. No.	Checks pd. Cost	Checks dep. @ ½¢ ea. No.	Checks dep. Cost	Coupons @ ½¢ ea. No.	Coupons Cost	Collections @ 22¢ No.	Collections Cost	Base Cost	Cost of Printing	Total Cost	Profit	Loss
$ 4,400	$ 12.23		$ 2.90	29	$ 1.16	343	$ 10.29	857	$ 4.29					$ .30		$ 18.94		$ 6.71
5,700	15.84		3.97	9	.36	521	15.63	14	.07					.30		20.33		4.49
5,800	16.12		4.11	24	.96	75	2.25	627	3.14					.30	$ .08	10.84	$5.28	
6,000	16.67			30	1.20	1165	34.95	2202	11.01			4	$ .88	.30		48.34		31.67
43,500	120.89			391	15.64	15	.45	391	1.96					.30		18.35	102.54	
$117,737	$327.24	$4.00	$18.47	1051	$42.04	7455	$223.65	10501	52.65			40	$8.80	$13.50	$18.00	$377.11	$132.71	$178.58

RANGE OF ACCOUNTS ANALYZED FOR EACH MONTH.

Month	No. of Accts.	Range		
January	3	$1,300	to	$ 2,000
February	2	1,300	to	1,400.
March	3	1,100	to	6,000
April	2	800	to	2,900
May	2	5,100	to	46,300
June	2	5,600	to	5,700
July	4	700	to	2,800
August	29	200	to	69,700
September	27	200	to	17,100
October	65	300	to	307,600
November	66	200	to	1,603,900
December	45	37	to	43,500

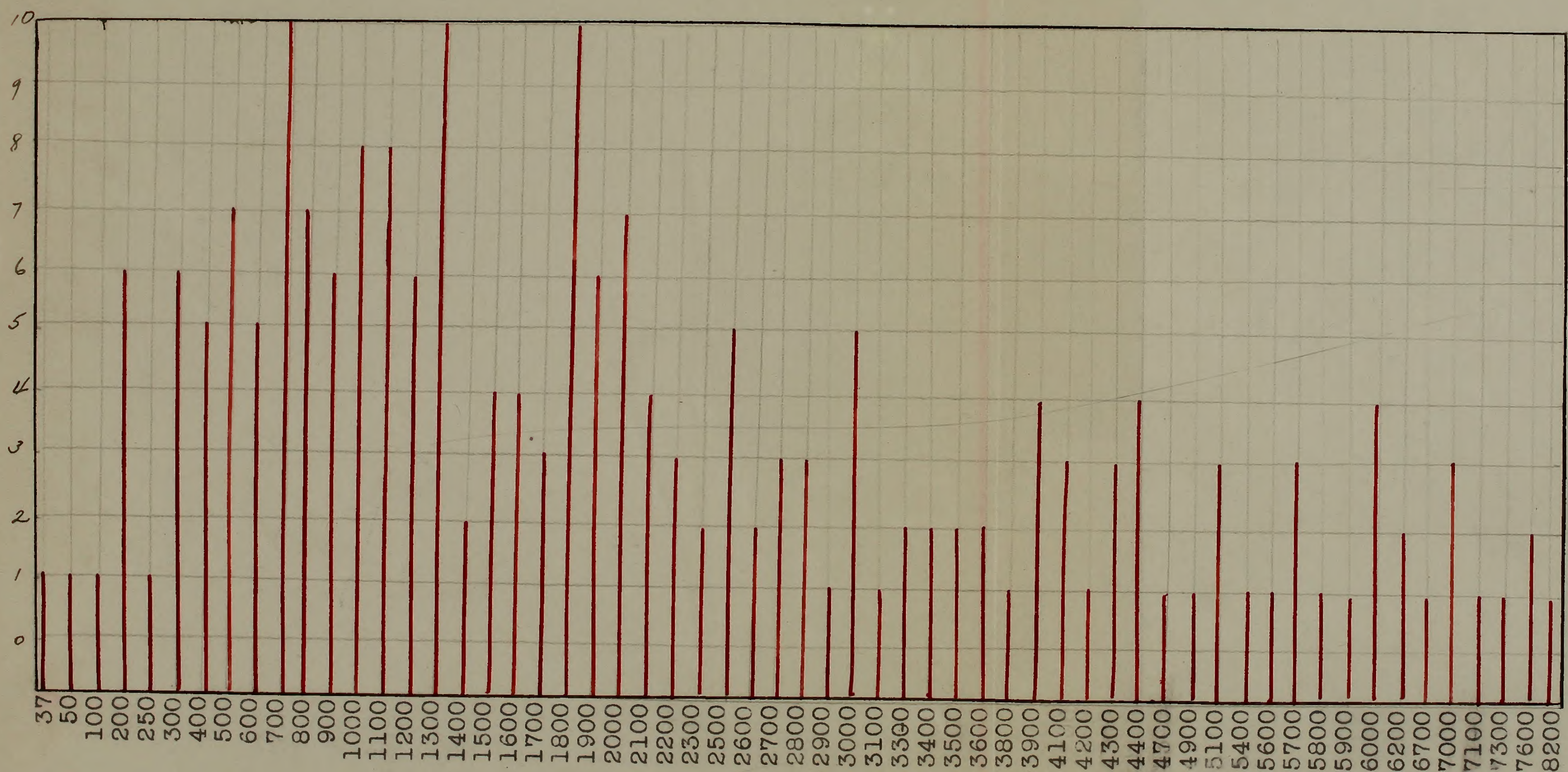
Total number of checking accounts analyzed - 250.

Whole range was from $37 to $1,603,900.

The wide range in amounts of accounts analyzed shows that the analysis was being carried on as an experiment and that the bank was still feeling its way as to what accounts really required analysis.

DISTRIBUTION OF AMOUNTS OF AVERAGE

COLLECTED BALANCE OF ACCOUNTS ANALYZED



It will be noted from this chart that 201 of the 250 accounts analyzed were under $10,000.

$1000 or less	64	accounts
$2000 or less	56	accounts
$3000 or less	28	accounts
$4000 or less	14	accounts
$5000 or less	13	accounts
$6000 or less	14	accounts
$7000 or less	7	accounts
$8000 or less	4	accounts
$10,000 or less	1	account
	201	accounts under $10,000.

and 120 or considerably more than half of these accounts were under $2000. This would indicate that the bank had an idea that they were operating their small accounts at a loss.

Following are summary tables made for the purpose of aiding the reader in seeing more clearly specific items, at a glance, which would not be readily discernible from the charts containing all of the data.

EARNINGS ON TWO HUNDRED FIFTY ACCOUNTS FOR

1931

Month	No. of Accounts	Total Av. Col. Balance	Earnings
January	3	$ 5,300.	$ 14.45
February	2	2,700.	7.23
March	3	8,400.	22.38
April	2	3,700.	9.38
May	2	51,400.	140.21
June	2	11,300.	28.16
July	4	6,600.	17.08
August	29	190,800.	486.96
September	27	81,000.	206.84
October	65	1,684.600.	4,129.45
November	66	2,335.300.	6,389.88
December	45	117,737.	327.24
	250	$4,498.837.	$11,779.26

It should be understood by the reader that $11,779.26 does not represent the net profit of the bank. It represents only the earnings on invested capital. The cost of operating these two hundred and fifty accounts must be deducted from this figure before net profit is arrived at.

INCOME FROM FLAT-RATE SERVICE CHARGES

Month	Charges Collected
January	
February	
March	
April	
May	
June	
July	
August	
September	$1.00
October	
November	1.00
December	4.00
	$6.00

The only income to the bank other than that from earnings as shown was the income from Service Charges in the amount of $6.00. The distribution of the service charges which were actually made on customers' accounts shows the reluctance of the bank to institute such a charge. In the entire year only six dollars in Service Charges were collected.

"DEPOSITS MADE" SUMMARY

Month	No. of Accts.	Total No. Deposits Made	Total Cost @ 4¢
January	3	66	$ 2.64
February	2	34	1.36
March	3	63	2.52
April	2	30	1.20
May	2	25	1.00
June	2	25	1.00
July	4	60	2.40
August	29	366	14.64
September	27	348	13.92
October	65	840	33.60
November	66	814	32.56
December	45	1051	42.04
	250	3722	$148.88

"CHECKS PAID" SUMMARY

Month	No. of Accounts	Av. Col. Bal.	No. of Checks Pd.	Cost at 3¢ ea.
January	3	$ 5,300.	4,168	$ 125.04
February	2	2,700.	1,532	45.96
March	3	8,400.	1,698	50.94
April	2	3,700.	854	25.62
May	2	51,400.	609	18.27
June	2	11,300.	1,924	57.72
July	4	6,600.	935	28.05
August	29	190,800.	3,308	99.24
September	27	81,000.	4,167	125.01
October	65	1,684,600.	7,444	223.32
November	66	2,335,300.	7,937	238.11
December	45	117,737.	7,455	223.65
	250	$4,498,837.	42,031	$1,260.93

It will be noted from this table that the three accounts in January had an average collected balance of only $5300 and they issued 4,168 checks which cost the bank $125.04 to handle. The total earnings from the investment of this $5300 amounted to only $14.45. Without considering all of the other charges applicable to handling these three accounts it will be seen at a glance they were unprofitable to the bank.

"CHECKS DEPOSITED" SUMMARY

Month	No. of Accts.	No. of Checks Dep.	Cost of ½¢ each
January	3	1,559	$ 7.80
February	2	871	4.36
March	3	1,248	6.24
April	2	605	3.03
May	2	117	.59
June	2	448	2.24
July	4	546	2.73
August	29	3,681	18.48
September	27	6,975	34.85
October	65	11,675	58.51
November	66	10,950	54.92
December	45	10,501	52.65
	250	49,176	$246.40

The total number of checks deposited was 49,176 at a cost of $246.40. The exact cost to the bank was really a little less and the difference between the figure shown and the actual cost is due to the fact that the bank does not use the fraction in the case of odd numbers.

COUPONS COLLECTED TOTALS

Month	No. of Coupons	Cost -½¢ each
January		
February		
March		
April		
May		
June		
July		
August		
September		
October	47	$ .25
November	16	$ .09
December		
	63	$ .34

Total coupons handled on the particular accounts analyzed were only 63. There is a discrepancy here of 2½¢ due to the banks not charging up fractions of ½¢ on some accounts.

"COST OF PRINTING" SUMMARY

Month	Estimated Cost
May	$ .53
June	
July	1.17
August	21.98
September	12.10
October	36.89
November	28.09
December	18.00
	$118.76

Until May of 1931 the bank had been issuing free to all of its customers all fo the deposit slips and checks they desired without allocating the cost of printing these items definitely to the checking account. After that time, however, the analysis department began to apply these costs directly to the cost of running the checking account service where they rightfully belonged. The cost was determined by taking the printer's bill on these items and dividing it by the total number of items printed to get the cost per item.

INTEREST PAID TOTALS

Month	No. of Accts	Amount Pd.
January	1	$ .15
February	-	-
March	-	-
April	-	-
May	1	38.10
June	-	-
July	-	-
August	15	61.22
September	9	11.89
October	41	1,099.52
November	33	3,123.53
December	13	18.47
	113	$4,352.88

The total interest paid out to depositors was $4,352.88. This amount therefore was an additional expense to the bank and represents a loss.

"COLLECTIONS" SUMMARY

Month	No. of Collections	Cost @ 22¢ ea.
January	2	$ .44
February	5	1.10
March	5	1.10
April	4	.88
May	-	--
June	1	.22
July	29	6.38
August	55	12.10
September	5	1.10
October	39	8.58
November	44	9.68
December	40	8.80
	229	$50.38

BASE COST TOTALS

Month	No. of Accts	Cost at 30¢
January	3	$ .90
February	2	.60
March	3	.90
April	2	.60
May	2	.60
June	2	.60
July	4	1.20
August	29	8.70
September	27	8.10
October	65	19.50
November	66	19.80
December	45	13.50
	250	$ 75.00

The bank estimates that it costs one cent a day to carry every account whether active or not. In some banks this is known as a "maintenance" charge.

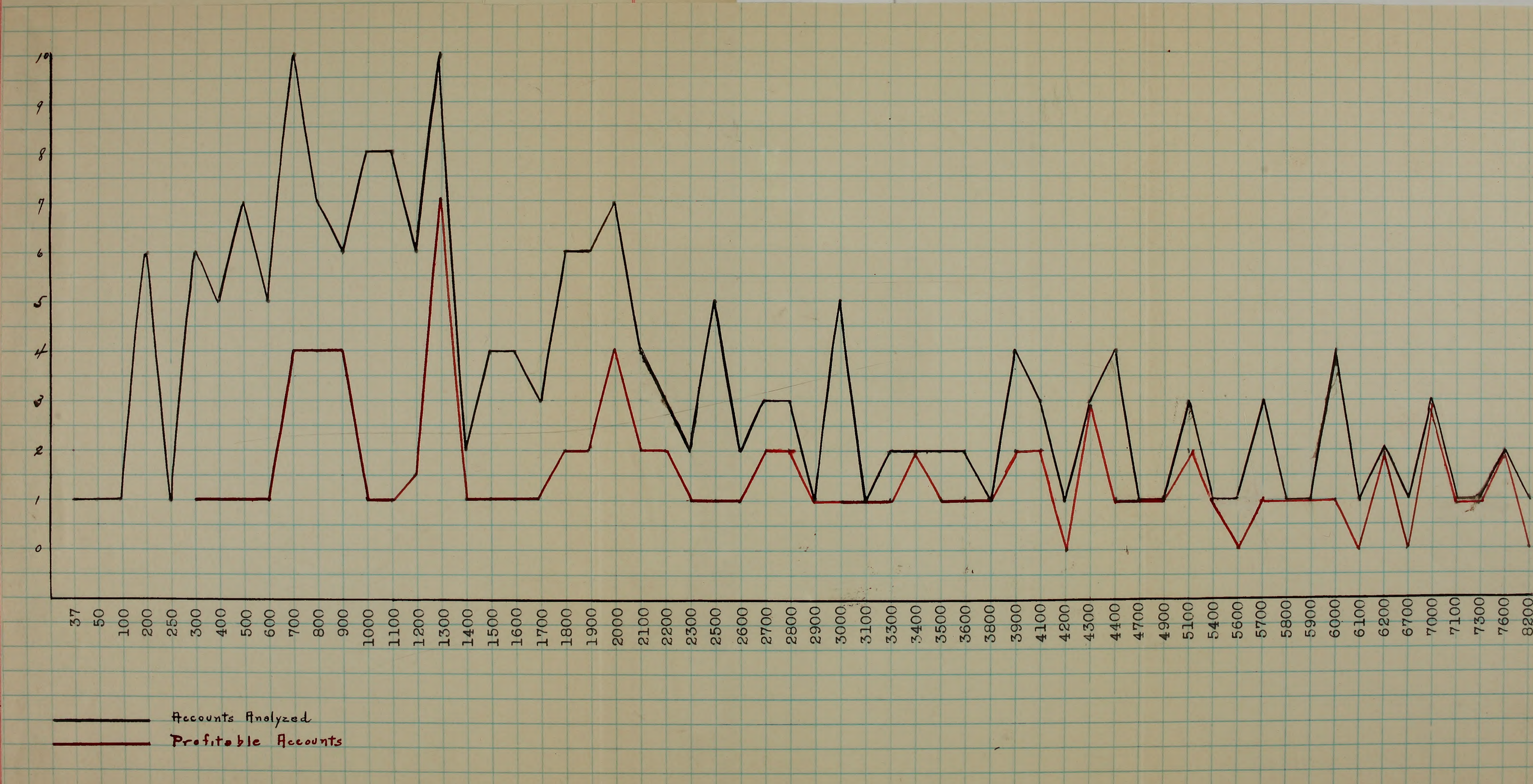
NET PROFIT

on

TWO HUNDRED AND FIFTY ACCOUNTS ANALYZED

1931

Income:		
Earnings	$11,779.26	
Service Charges	6.00	
Total Income		$11,785.26
Expenses:		
Deposits Made	$ 148.88	
Checks Paid	1,260.93	
Coupons	.34	
Checks Deposited	246.40	
Cost of Printing	118.76	
Interest Paid	4,352.88	
Collections	50.38	
Base Cost	75.00	
Total Expenses		6,253.57
Net Profit		$ 5,531.69



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Accounts Analyzed
Profitable Accounts

TABLE SHOWING THE VARIOUS SIZES OF ACCOUNTS

UP TO $7600. AND THE

PROFITS ON SAME.

Average Collected Balance	Profit for one month
$ 300.	$ .52
400.	.44
500.	1.07
600.	.77
700.	1.47
700.	1.29
700.	..74
700.	.72
800.	1.13
800.	.45
800.	.91
800.	.89
900.	.55
900.	.37
900.	1.15
900.	.06
1000.	1.45
1100.	.19
1200.	2.67
1200.	2.43
1300.	.10
1300.	1.99
1300.	.20
1300.	1.55
1300.	2.05
1300.	2.57
1300.	2.08
1400.	.97
1500.	2.70
1600.	2.91
1700.	3.38
1800.	3.06
1800.	2.14
1800.	3.35
1800.	3.39
1800.	1.71
1900.	1.89
1900.	.51
2000.	3.07
2000.	2.22
2000.	1.88
2100.	4.56
2100.	1.35
2200.	3.31
2200.	3.22
2300.	1.87
2500.	2.28
2600.	3.04
2700.	.03
2700.	5.47
2800.	5.25
2800.	5.23
3000.	1.08
3300.	4.99
3400.	3.26
3400.	1.63
3500.	7.15
3800.	5.74
3900.	7.76
3900.	3.09
4100.	4.59
4100.	6.08
4300.	9.91
4300.	7.16
4300.	7.67
4400.	8.22
4700.	3.55
4900.	8.40
5100.	12.20
5100.	1.54
5400.	7.32
5700.	6.60
5800.	5.28
6000.	.57
6200.	12.03
6200.	14.43
7000.	13.29
7000.	13.90
7000.	2.11
7100.	6.58
7300.	10.84
7600.	7.37
7600.	12.91

A careful study of the preceding table will reveal some interesting details. On an average collected balance of $700. earnings range from $.74 on one account to $1.47 on another; on an average collected balance of $1300. they range from $.10 to $2.57; on an average collected balance of $2,000. they range from $1.88 to $3.07; on an average collected balance of $2100. they range from $1.35 to $4.56. On an average collected balance of $2700 the range is from $.03 to $5.47; on an average collected balance of $5100. the range is from $1.54 to $12.20; and on an average collected balance of $6,000 on one account the earnings were only $.57. This indicates that something besides the size of the average collected balance is responsible for the size of the profit. A careful comparison of some of these accounts which show a wide variation will indicate the other factors responsible for reducing profits.

Let us analyze the two accounts listed which have average collected balances of $2700. each. The earnings on Account No. 1 were $6.89, while the earnings on Account No. 2 were $7.40, yet Account No. 1 showed a profit of $5.47 in the final analysis, while Account

No. 2 with the larger earnings showed a profit of only $.03. Both accounts set up show the following details:-

Account I

A	Average Collected Balance	$2,000.	
	Earnings on above		$6.89
	Loss:		
	Interest Paid	$ .70	
	12 checks paid @ 4¢ ea.	.36	
	Printing	.06	
	Base Cost	.30	
		$1.42	1.42
	Earnings or Profit		$5.47

Account II

Average Collected Balance	$2,000.	
Earnings on above		$7.40
Loss:		
Interest Paid	$1.40	
22 deposits @ 4¢ ea.	.88	
99 checks paid @ 3¢ ea.	2.97	
151 " dep. @ ½¢ ea.	1.76	
1 collection @ 22¢ ea.	.22	
Base cost	.30	
Printing	.84	
	$7.37	7.37
Earnings or Profit		$ .03

It will be noted from the above analysis that the main difference in these two accounts is in the activity of the account. Account No. I required few services of the bank and was, therefore, less expen-

sive to handle than Account No. II which required a great many services. We may conclude, then that activity in an account is costly; it costs the bank money to handle each item, and the cost in Account No. II was so great that it almost entirely wiped out the earning power of the money as far as the bank was concerned. The bank in this instance did the work required of it and earned as a reward for services rendered only $ .03.

The two accounts listed with average collected balances of $5100. are two more striking examples of what activity does to accounts with similar balances. Both of these accounts were carried at the bank in the month of October, 1931.

ACCOUNT NO. III

Average Collected Balance	$5,100.	
Earnings on above		$12.50
Loss:		
Interest Paid		
26 Deposits @ 4¢ ea.	$1.04	
220 Checks paid @ 3¢ ea.	6.60	
383 Checks dep. @ ½¢ ea.	1.92	
Base Cost	.30	
Printing	1.10	
Total Cost	$10.96	10.96
Earnings or Profit		$ 1.54

ACCOUNT NO. IV

Average Collected Balance	$5,100.	
Earnings on above		$12.50
Loss:		
Interest Paid		
Base Cost	$ .30	.30
Earnings or Profit		$12.20

Here again, it will be seen that the activity demands made upon the bank reduce profits. In Account No. III the profits after operating expenses were deducted were only $1.54, while in Account IV the only deduction was the maintenance charge, as there were no services required by the account.

After such analyses as these the banker began to realize that some accounts were not contributing as much to his prosperity as were others. He found in some cases that the accounts were not paying their way and that the services demanded far outweighed the privileges they should be receiving in consideration of the balances kept in the bank. The banker began to look for a solution to his problem.

CHAPTER V

THE BANK'S SOLUTION REVEALED

After a cursory glance at the Profit and Loss Account on these two hundred and fifty accounts the unthinking person might dismiss the subject since it shows the bank making a profit of some $5,582.50. The story does not end there, however. Just because a profit on operations is shown, it does not mean that the bank should be satisfied with the condition of its business. As a matter of fact the bank is not satisfied and the thinking customer is not satisfied because the profit shown is altogether too low when one considers the amount of money handled by the bank, and the risk involved in investing the money in order to make this small profit. Should the bank be unfortunate enough to make one misstep in the investment of its funds, and suffer a loss which was unforseen, the income derived from these two hundred and fifty accounts would not assist very greatly in offsetting any sizable loss.

Furthermore, because the bank is fortunate enough to secure some valuable accounts and is able to operate so as to secure large profits from the investment of these particular funds, is no reason why the bank should carry a host of small unprofitable accounts

for the accomodation of customers, the activity of which will greatly diminish the profits. It is not fair to the bank which is entitled to a profit for services rendered; it is not fair to the valuable account since it weakens the position of the bank into whose hands they have entrusted their funds.

The first attempt to place a charge for services on unprofitable accounts came with the advent of the flat-rate service charge. The flat-rate charge was adopted in various banks all over the country at different times.

Mr. E. S. Crawford, Vice President of the Industrial Trust Company of Providence Rhode Island,[1] states that in April, 1924 they carried over 6,000 accounts on their books with average balances of \$34.81. The total amount of deposits represented in these 6000 accounts was \$209,000. All the accounts were active, averaging twelve checks and two deposits per month. Over seventy per cent of the trouble with regard to bad checks was due to this division of accounts. In 1929 they found the solution to their difficulty in the flat-rate service charge. They considered it fair and efficient. No exceptions

1. "Making Checking Accounts Pay"- E. S. Crawford - Bankers Magazine 119:509-12 O.'29

were allowed. The charge was \$1.00 monthly figured on daily balances, every account treated on its own basis. The service charge rate was the one recommended by the Providence Clearing House Association. The ruling read that a charge should be made "on all checking accounts the ledger balance of which is less than One Hundred Dollars on any one day in any month. This charge will in no way apply to Savings accounts." The only exceptions were: A. Accounts against which no checks were paid during the month and B, Accounts of the United States, the State of Rhode Island. Mr. Crawford further states that upon instituting the service charge, 30% of these 6000 accounts closed their accounts, 30% increased their balances and 40% remained and are paying the charge. An examination of the bank's position after the charge was added was as follows:-

6,000 accounts averaging \$34.80		\$208,860.
30% withdrew		62,658.
	Total	\$146,202.
30% increased deposits at least to \$100.		117,342.
		\$263,544.
40% remained and are paying the charge		28,800.1 yr.
	Total	\$292,344.

Present Total	\$292,344
Previous Total	208,860
	\$ 83,484

The financial condition of the bank was improved, therefore, to the extent of $83,484.

The actual records of what was accomplished over a period of three years in a small country bank by the installation of a service charge on checking accounts is also related by Mr. K. A. Morgan.

"On May 4, 1926, 466 accounts showed deposits of $89,934.75. Accounts under $100 were sixty-two per cent of all the accounts and represented less than 10% of the deposits. With only a few exceptions these were all unprofitable. On December 1, 1926 an advertising campaign was started which announced that there would be a fifty cent charge on all accounts with average balances of less than $50 by the close of business January 31, 1927.

"On May 4, 1927 after four service charges, there were 364 accounts and total deposits of $89,158.86; 47% of the accounts being under $100 and representing less than 10% of the total deposits. 102 accounts lost during the previous twelve months and only $775.89 in deposits. At this time the service charge amounted to $32. per month.

"On May 4, 1928 it was not materially different

except that there was a further loss of accounts under $100 and a gain in deposits of 15%. The accounts under $100 amounted to 45% of the total and represented less than 6.2% of the total deposits. The average balanee in the accounts over $100 had increased from $434.90 to $504.26.

On May 4, 1929 there were 342 accounts and deposits of $99,601.17 of which 46% were under $100 and represented less than 5.7% of the total deposits. This is practically the same as the year before and the bank assumed that so far as the effect of the service charge was concerned, the accounts had become stabilized. Instead of having 288 accounts with balances under $100 in 1926 they had only 157 such accounts in 1929, a reduction of 133.

In order to determine the amount actually saved by losing an account, five accounts, which had withdrawn on acoount of the service charge, were selected at random. The total number of checks issued and deposits made were ascertained for these five accounts in the month of May, 1927. It was found that they averaged 19.8 checks during the month and made an average of 4.2 deposits. In computing the cost of

handling checks and deposits, average figures were taken and it was assumed that all items in the deposits were drawn on this bank. The following results were obtained: It had cost the bank 72.9 cents each month to handle one account or $8.748 for one year. It would cost the bank 133 times $8.748 or $1,163.48 each year if they had continued with these accounts. There had been no great variation in the amount of deposits in these accounts so that no credit may be given for deposits which might have oome to the bank on these 133 accounts." [1]

To a small bank this is a good saving and well worth the attention of the management.

It soon became apparent to the banks of the country that the flat-rate service charge was not altogether fair. It discriminated against the small depositor and was graded not according to the amount of work whihh the bank was asked to perform but solely upon the balance which the depositor was able to keep. He was charged a fee if his balance fell a few dollars short of a fixed amount, while his neighbor, with perhaps only a slightly larger balance, went off scotfree. It handicaps the poor man.

1. "The Biggest Leak was Plugged" - K.A. Morgan American Bankers Assn. J. 23:739 F'30

An account which lies idle, if below the minimum is taxed at the full rate, while an active one, which is a real burden to the bank, gets services for nothing, merely because its balance is somewhat higher. As a matter of fact some of these accounts, as was seen in the analysis, are really a source of real loss to the bank.

Bankers agreed generally after a study of the situation, that the balance alone was not the proper criterion upon which upon which to estimate the value of an account to the bank. They realized that the work entailed in handling the account must also be taken into consideration. As a result of this trend of thought, suggestions from bankers in all parts of the country began to take shape in the form of a system whereby each individual account would pay for the services rendered to it by the bank.

In the October issue of the American Bankers Association Journal, 1930, Mr. W. D. Shultz outlines the need for the charges and a method of arriving at a just charge. He says "Decreased profits and bank failures run hand in hand and anything which will assure more substantial profits can also be regarded

as a preventitive of failures. We are told that several thousand banks in the United States were operated at a loss or without a proper profit during 1929. With this occuring during a period of high interest rates, what will the record show during low interest periods if no other income has been provided or the costs of operation shall not have been materially reduced." [1] He suggests what he calls "The Decimal Method". It is called the decimal method because it is entirely on a basis of tens and hundreds. The first cost to the bank is the maintenance cost, or a "readiness to serve" cost similar to that incurred by power and light companies. He considers that the possible income from the first $100 average in the account would be necessary to cover this maintenance cost.

Therefore, a $10 balance is required for each check charged to the account. That is, a $200 average balance entitles the depositor to ten checks, a $300 average to 20 checks and so on. If more checks are paid than the balance warrants, a charge of 4¢ for each additional check is made. Thus, if 30 checks are paid against the $200 average the charge is 80¢.

1. "Banks Must Profit" - W.D. Shultz, Am. Bankers Ass'n Journal 23:292-3 O'30

That is, 30 checks to be charged for at 4¢ or a charge of 80¢. The flexibility of the method is apparent. This charge per check may be raised or lowered in a particular community, according to the circumstances controlling that locality. From three to four cents is proving to be equitable in actual practice.

It is apparent this suggestion deals only with "checks on us". To arrive at the usable average balance, float must be figured and to know the real value of an account the other factors mentioned must be considered." [1]

There still is no uniformity in bank charges as evidenced in a survey made recently by the Bank Management Commission of the American Bankers' Association.

"The Bank Management Commission of the American Bankers' Association has completed a new nation wide study of service charges. The results indicate that a great majority of the banks of the country are breaking with the tradition of giving away millions of dollars in free services annually. The survey covered the activities of 180 clearinghouses including 27 regional organizations. Out of the 180 organizations 93% - all but 13 - are now maintaining service charge

1. "Banks Must Profit" W. D. Shultz - Am. Bankers Ass'n Journal 23:292-3 O'30

systems based either upon a flat rate charged when monthly average deposit balances fall below a minimum or based upon the measured or metered system. The flat charge system was maintained in 109 of the clearinghouses; 46 maintain the metered service system, while 12 reported that there was no uniformity in the practice of their member banks, some employing the flat rate and others the metered system.

Service charges against depositors under the flat rate system varies in the several parts of the country and among classes of banks largely because of special conditions and also because the flat rate system was the first adopted and the rates have been more or less experimental.

Over a third of the clearinghouses report that the monthly flat charge of banks in their organization was 50¢ on balances averaging less than $50. another third reported their charge was $1. a month on balances averaging less than $100., while a little less than a fourth of the organization used a charge of 50¢ a month on balances averaging less than $100. the rest showed varying rates including 50¢ a month on balances less than $75; $1 a month on balances

less than $200. $1. a month on those less than $300.; 50¢ a month on balances less than $200.; 75¢ a month on balances less than $100.; $2. a month on those less than $50.; and $2. a month on those less than $200.

It is admitted by the reporting banks that most of these rates are an approximation based on averages in an endeavor to secure for the banks a fair rate for the services actually rendered and that in many cases they are inequitable inasmuch as in some cases they are not high enough to cover the cost of the services given while in other cases where the services given are limited they are too high.

Many banks now using the flat rate system say that the measured charge now used by 46 of the 180 reporting clearinghouses is preferable since it sets the charge according to the services rendered. Practically all of the banks in this group charge a fixed monthly fee to cover overhead. To this they add charges according to the services rendered, chiefly the number of checks drawn against an account.

About 1/5 of these banks make an initial charge of 50¢ per month on balances of less than $50.;

1/5 charge 50¢ on balances less than $100; 1/5 charge $1 on balances of less than $100; 1/5 charge $1 on balances less than $200. The rest use a basic charge which decreased in amount proportionately if the average of the deposit balance increases.

As the initial charge the "metered" charges also vary. About 1/3 of the clearinghouse report that their banks allow one free check for each $10 average balance above the minimum limit on which the fixed charge is based. Another third have a graduated scale of free checks increasing in multiples of five for each $50 or $100 of deposits above the minimum limit while the other third indicate the number of free checks allowed on the basis of the initial charge and make no further charge unless the privilege is abused.

About half the members of the clearinghouses using the measured system and the vast majority of banks using the flat rate system also analyze all large or unusually active accounts and charge the depositors with the cost of the service actually rendered.

While far the greater number of accounts

affected under both systems are small, the greater portion of the earnings of the banks for the fees collected is from the larger and more active accounts. Medium-sized western banks report that in some cases the monthly fee of some of the larger accounts runs as high as $100. There is considerable difference of opinion among banks using the metered system as to whether or not the latter avoids the necessity of analyzing larger and more active accounts.

Banks which have continued the analysis of accounts in addition or in connection with the metered service report that their experience is that analysis is still necessary particularly in active commercial accounts.

The chief objection to the metered system of charging for each check drawn at the present time is that when taken in connection with the government tax on checks it renders the cost of each check rather high; although in some cases this is approved by the bankers as tending to reduce the number of checks and thus further reduce the cost of handling accounts.

An important feature of the survey is the report

of the banks that few depositors object to the service charge and many depositors express surprise that such a charge had not been imposed before." [1]

It is natural, to a certain extent, that there should be a wide divergence in the matter of service charges as shown by this survey. Every bank must determine for itself, by analysis, its own costs.

An equitable system suggested by one banker, in the basence of cost analysis is as follows:-

"Figure an interest income of 5% which would be \$5.00 a year or roughly 40¢ a month on each \$100 average of checking account. The cost of salaries, cost of stationery, rendering a monthly statement, etc. is ever present and it is estimated that the first \$100 average balance of each account is absorbed in the payment of a maintenance or overhead charge even though no checks are paid." [2]

The following form is very simple and easily applied:-

1. "Abolish Free Services" - Bank Management Commission. Am. Bankers Assn. Journal - May 1933.

2. "Service Charges Have Merely Scratched the Surface" - W.D. Shultz, Am. Bankers Assn Journal 22:961-2 April 1930.

Assume:

Average book balance	\$2500.00	
Less - Average float of say	500.00	
Average net balance	\$2000.00	
Less - 15% Reserve	300.00	
Loanable Balance	\$1700.00	
Monthly Interest Income @ 5%		\$7.08
Activity Costs:-		
125 Checks pd. at 4¢ ea.	\$5.00	
6 Deposits at 2¢ ea.	.12	
34 Checks deposited at 1½¢ ea.	.51	
Total Activity Cost	\$5.63	
Maintenance Cost	.40	
Total Cost		6.03
Profit for the Month		\$1.05

The Georgia State Bankers Association inaugurated a plan of service and stop-loss charges which was adopted by 183 Georgia Banks. They report an increased income amounting to \$213,735 as a result of following the ten-point plan. The plan follows:-[1]

1. Service Charge on unprofitable accounts, usually 50¢ a month, minimum balance, \$50;

2. Service Charge on checks drawn against insufficient funds, usually 25¢ an item;

3. Service Charge on notes allowed to run overdue;

4. Service Charge for overprinting checks, usually the actual amount of the printer's bill;

5. Service Charge on small loans figuring less than \$100;

6. Exchange on out-of-town checks cashed or deposited;

7. Fee for cashier's checks;

1. "Measured Service Charges" - Orval W. Adams - Am. Bankers Assn Journal, July '33.

8. Limitation on interest of time and savings deposits:

9. Statements of assets and liabilities required from all borrowers of more than $500; and

10. Establishment of credit bureaus for the interchange of information by the banks to forestall duplicate and multiple loans.

The newest schedule of Charges is suggested by the Bank Management Commission of the American Bankers Association. This schedule is an attempt on the part of the Commission to standardize somewhat the charges throughout the country.

The Schedule of Charges [1]

Average Balance Less than $200:
Base charge: One dollar for one or more checks, 3¢ extra for each check in excess of four, one additional free check for each $10 average balance above $100, 2¢ per item charge on out of town checks deposited.

Average Balance Between $200 and $500:
No base charge: 14 free checks, with one additional for each $10 average balance over $200, 3¢ charge for each additional check, 2¢ per item charge on all out of town checks deposited.

Average Balance in Excess of $500:
Monthly analysis to show loanable balance in excess of 15% legal reserve and float charges: 2¢ per check paid and deposited, 15¢ per return item, 25¢ per outgoing collection, 75¢ per $1000 average loanable balance for administration, 30¢ per $1000 currency handled. Credits, 5% per annum on loanable balances. Public service depositors who pick up checks daily and assume responsibility for signatures, endorsements, stop payments; per-item charge reduced to 1¢.

1. Pamphlet Issued by Bank Management Commission of American Bankers Association - 1933.

Items Cashed for Non-Customers:
Out of town checks: 10¢ up to $25, 25¢ between $25 and $50, 35¢ between $50 and $100, over $100, minimum 50¢.

Service Charge on Small Loans:
$1 on new or renewed notes of $200 or less, plus regular interest.

Penalty Rate on Return Checks:
50¢ per check returned for insufficient funds.

Charge on Exchange Sold:
$1 per $1000 on all drafts outside of the State, 10¢ minimum on any draft or cashier's check. Rates optional for correspondent banks, association members sugar companies, United States Government and its officials, corporations mainly located outside of the State, county, municipal, and boards of education.

Escrow Charges:
$5 in advance up to $1000, $10 in advance over $1000.

Safe Keeping Charges:
$1 per $1000 face value with $5.00 minimum on mortgage, bonds, notes, etc. 50¢ per $1000 face value stocks, 5¢ per share on stocks of no par value, $5 annual minimum, charges optional on securities kept for less than 30 days and waived on securities pledged against public deposits.

Telegraphic Transfer Charges:
Investment bankers and brokers: 1/10 of 1% to $5000 with 1/20 of 1% on excess plus cost of telegrams and charges. And others: 1/8 of 1% up to $5000 and 1/10 of 1% on excess, plus costs of telegrams and charges.

Charges for Collections Received from Depositors:
Coupons: United States 10¢ per $100 with minimum 5¢ per item; others 1/10 of 1% with minimum 25¢ per item. Bill of Lading drafts: 25¢ on first $100 and 10¢ on each additional $100 with minimum of 40¢.

Drafts: 25¢ on first $100, 15¢ each additional $100 with minimum charge of 40¢. Partial payment notes, deeds, contracts, etc: acceptance fee $1 in advance, collection charge 1/10 of 1% or costs, partial payment charges 25¢ per payment.

Charges for Collections Received from Non-Depositors: Collections acceptable only with presentation fee of 50¢, drafts with Bill of Lading or otherwise, 25¢ minimum on unpaid items, collection charge 1/10 of 1% with 25¢ minimum or costs, drafts on brokers or investment bankers 1/10 of 1% up to $5000 and 1/20 of 1% on excess, deeds notes, papers, etc. 25¢ minimum on unpaid items. Collection charges 1/8 of 1% with 25¢ minimum or costs, stock transfer 50¢ minimum or costs; warrants on state, county, or city with out-of-town endorser 1/10 of 1%, minimum 25¢.

On the basis of the above charges the Utah State National Bank, Salt Lake City, Utah set up definite aims in their banking business as follows: [1]

"Allocation of equitable uniform charges based on actual services rendered, elimination of nuisance accounts and the abuse of the checking privilege, the reduction of 'insufficient funds' transactions, and the education of customers to the cost problems of banking."

The results of this effort were as follows:

"The annual increase in net profits for Salt Lake City Banks was approximately $112,000; 50% reduction in number of small checks, increased customers' balances, large reduction of 'insufficient funds' item, greater public confidence in banking, and increased cooperation among the banks of the community."

Following is a letter received by the writer from Mr. Leo D. Kelly, Vice-President of the Mercantile-Commerce Bank and Trust Company, It not

1. "Measured Service Charges" - Orval W. Adams - Am. Bankers Assn. Journal - July 1933.

only gives the best plan yet devised but shows the willingness of this banker to cooperate.

July 13, 1933.

Miss Alice L. Murphy,
975 Adams Street
Dorchester, Mass.

My dear Miss Murphy:

In keeping with your letter of the 8th, I take pleasure in enclosing herein literature on my "Metered Charge for Bank Service Plan" which you request.

You will note that the yellow folder, which is intended for distribution to a bank's local customers, lists the various charges and the reason for their installation, and that it also announces the date the plan becomes effective. This plan contemplates that this yellow folder will be distributed to the bank that adopts the charges two or three weeks in advance of the date they become effective.

I am also enclosing herein a time float chart, which particular chart applies to the banks located in the head office of the St. Louis Federal Reserve District outside the city of St. Louis itself where a Federal Reserve Bank is located. This float chart shows the exact average time any item that is deposited in a bank located outside the city of St. Louis in this head office, Federal Reserve District, on any point in the United States is outstanding in process of collection, (float), and opposite each point is extended the rate to be charged per Thousand Dollars, which rate is based on exactly 6% per annum for the exact amount of the check for the exact time it is outstanding in process of collection.

I am also enclosing herein a demonstration showing how simple it is to compute the charge at the end of each month for certain excess activity in an account.

I will appreciate it very much if you don't

mind doing so, if you will be kind enough to send me a copy of your thesis when you have completed it. I believe it will assist you in preparing your article if you will keep in mind that while a bank in the interior points often received an interest rate on local loans of as much as 7% and even 8%, banks in larger cities seldom, if ever, obtain more than 6% interest on loans, and that in the case of every bank prudent banking does not permit the loaning of all of their deposits in the shape of local loans. On the other hand, every bank must maintain in the shape of cash and exchange on hand a fairly sizable share of all of their deposits, and in addition, sound banking compels that it invest another sizable amount in high type, low yield bonds, such as Government securities. I would also remind you that of late Government Treasury bills of short maturities, such as 60, 90 and 120 days have been selling on a basis to yield only about 1/3 of 1%, and often less.

The above will explain the fact that while banks may be getting as much as 5%, 6%, and in the case of interior banks 7% and 8%, the composite return on total deposit funds in a bank will average only anywhere from 3% to 3½% and 4%. Hence, due to the cost of handling the activity transaction for each $10 of average balance, a bank is getting only its cost of operation out of this manner of charging for its services.

Rest assured it gives me pleasure to endeavor to contribute something to your commendable effort.

Very truly yours,

(Signed) Leo D. Kelly,

Vice President.

In Paragraph 6 of Mr. Kelly's letter it will be noted that he says, "banks may be getting as much as

5%, 6%, and in the case of interior banks 7% and 8%, the composite return on total deposit funds in a bank will average only anywhere from 3% to 3½% and 4%."

The writer checked these figures in a large Boston bank and found the following to be true:-

Average earnings on $1,000.

Year	High	Low	Average
1924	$3.32	$3.01	$3.16
1925	3.51	3.22	3.36
1926	3.67	3.19	3.43
1927	3.65	3.16	3.40
1928	3.59	3.12	3.35
1929	4.55	4.03	4.28
1930	4.09	3.07	3.54
1931	3.10	2.55	2.75
1932	3.08	2.46	2.85
1933		January	2.32
		February	2.22
		March	2.38

It will be noted from these figures that in only one year, 1929, did the rate rise above the high mark of 4% which he named. In only one case was the rate over 3½%. The total average for the whole 9 years given is only $3.34 on $1000.

THE METERED SERVICE PLAN OF MR. LEO D. KELLY
VICE-PRESIDENT OF THE MERCANTILE-COMMERCE
AND TRUST COMPANY, ST. LOUIS, MISSOURI

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LOANS

A service charge of $1.00 will be made on each note handled above $300. On notes of $300 or less, the charge will be 50 cents each. This schedule applies regardless of whether the note represents a new loan or a renewal in full or in part of an existing loan.

To the end that notes will have prompt attention at maturity, notices will be sent the maker in advance, and if unheeded, further notices will be sent every three days, and a charge of 25 cents will be assessed for every such notice it is necessary to send after maturity.

ACTIVE ACCOUNTS

(An active checking account shall be one against which one or more checks are drawn within the month.)

Active checking accounts with average daily balance for any month of less than $100, 50 cents per month, provided that no more than 5 checks are drawn

against such account within the month. If more than 5 checks are drawn, additional checks will cost depositor 4 cents each.

A customer will be permitted to draw one free check and/or issue one deposit ticket for each $10.00 of average balance during the month. However, a charge of 4 cents per check and/or deposit ticket issued in excess of this ratio will be assessed at the close of each month. For example, a depositor with an average balance of $200 during the month is permitted 20 such free transactions without charge. If he has 23 transactions he will pay 4 cents each on the excess. In this case there would be three excess transactions with a charge of 12 cents.

Likewise, a customer will be permitted to deposit one check on any other bank in this city (known as Clearing House checks), for each $5.00 of average balance during the month, and a charge of 2 cents will be made for such excess Clearing House checks deposited.

THE "FLOAT" OR "CONVERSION" CHARGE

On all checks of $100 or less, deposited or cashed on banks outside the city, there shall be a charge of 6 cents each, and on such checks in excess of $100,

a charge shall be made at the rate of 6% per annum for the actual "float" time. By "float" is meant the actual time it takes for a check to get to its destination and the returns to be received. These returns are actual money, or they may be the equivalent thereof. It is necessary to make a float charge because when uncollected funds are placed immediately to the customer's credit, it is equivalent to lending the customer the amount of the check, without interest, for a period of from three to ten days. The float charge, then, is in effect a fair charge on the money thus credited to the customer's account, at the rate of 6% per annum. This "float" charge is made for converting the out of town check into immediately available funds. This charge is based on the knowledge that, with but few exceptions, at least three days will be consumed in the collection of any check on outside points.

INSUFFICIENT FUNDS

Against the makers of all checks which are returned for insufficient funds, there shall be assessed a charge of 25 cents.

EXTRA SUPPLIES

For depositors who desire special checks,

endorsement stamps, ink pads or other items, these will be furnished at actual cost.

CASHING CHECKS FOR OUT-OF-TOWN FIRMS

Checks drawn by out-of-town companies and used for payroll purposes shall be assessed a charge of 10 cents each for cashing. Cream and produce checks drawn by out-of-town companies shall pay a service charge of $\frac{1}{4}$ of one per cent, or $2.50 per $1,000, with 10 cents as the minimum charge.

NON-CUSTOMERS

Individuals who are not customers of the bank shall be charged a fee for cashing out-of-town checks as follows: 15 cents for any check up to $50; 25 cents for a check from $50 to $100; any check over $100, 25 cents for the first $100 and 15 cents for each $100 in excess. In the case of payroll checks, a charge of 10 cents each will be made, as previously mentioned, but whenever the issuing company pays this charge, the employe will not be assessed anything.

SAVINGS ACCOUNTS

Any account of less than $100 which has more than three withdrawals in any month will be assessed 10 cents for each withdrawal in excess of three.

Interest on Savings Accounts is 3 per cent, payable semi-annually on dates announced in savings passbooks. If an account is closed between interest dates, no interest is paid for that period.

CERTIFICATES OF DEPOSIT

Time Certificates of Deposit shall not be cashed prior to maturity. Interest rates are 3% per annum on such deposits whether they run six months or twelve.

EXCHANGE

On cashier's checks and drafts there shall be a minimum charge of 10 cents, with a basic charge of 5 cents for each $100 or fraction thereof, with a maximum of $1.00.

Foreign exchange shall be charged for at current rates.

Travelers Checks are to be charged for at the rate of three-fourths of one per cent, with 50 cents as the minimum.

Transfer of money by telegraph, double Western Union rates.

COUPONS

On coupons received over the counter for credit or collection, there shall be a charge of 15 cents per coupon envelope of each separate issue.

Government bonds are an exception and in their case one-half of the above rate shall apply.

COLLECTIONS

A minimum charge of 15 cents and maximum charge of $1.00 per item plus actual cost of collecting will be made to individuals, firms and corporations on all checks left for collection.

Notes and drafts, including bills of lading drafts, a minimum charge of 50 cents per item, and maximum charge of $2.00, plus actual cost of collection.

Bonds, 50 cents per thousand, with a minimum of 15 cents.

Exchange of coupon for registered Liberty Bonds, or vice versa, 50 cents for each $1,000 with 50 cents as the minimum.

Contract payments, 25 cents for amounts up to $100 and 15 cents for each $100 beyond that.

In every transaction which involves registration fee, postage and insurance, all such expense shall be charged to the customer.

Rents, 5 per cent of the amount collected.

SAFEKEEPING

Bonds left by customers for safekeeping shall pay

a charge of \$1.50 per annum for each \$1,000.

MISCELLANEOUS

Automobile application for license plates, Certificate of Ownership, transfer of license plates, 25 cents.

Chattels inspection, \$2 to \$10, depending on time required.

Clerking Sales, 2%, with a minimum of \$10, which fee goes to employe.

Credit Reports (banks excepted), 25 cents.

Income Tax Reports, \$2 per hour--minimum charge, \$1--for filling out reports according to information and at direction of tax payer, which fee goes to employe.

Notary fees will be charged and retained by the Notary as provided by State Law.

Payment of Taxes, per receipt, 25 cents.

Securities, Purchase or Sale, actual brokerage fees plus $\frac{1}{4}$ of one per cent, in addition to registration, postage and insurance expense. In case of government bonds, however, actual broker's fee plus 1/8 of one per cent.

Stock Transfers, in Corporations other than the bank, 50 cents per certificate.

The following account will show the way the Metered Plan works as regards activity on deposit tickets, checks against customer's accounts, and clearing house checks.

Assume that John Brown has an average net balance in the bank for a 30 day period ending June 20th, (from May 21 to and including June 20), of $1,700. Under the Metered Plan as he is allowed one full transaction for each $10 of average balance, he has paid for 170 transactions with his balance.

Assume that he issues....................25
deposit tickets--that he draws..............110
checks against his account during that
period, and that he deposits in his account
200 checks on other banks in the same city.
Inasmuch as Clearing House items are charged
for at one half the charge made for deposit
tickets and checks against own account,
the bank would consider these 200 Clearing
House items as equivalent to 100

transactions--this would make a total of 235
transactions.

From this deduct the number of transactions paid for with his balance.............170

Leaving excess transactions of......... 65
With a charge of........................04
$ 2.60

The clerk would simply make out a charge ticket for $2.60 and debit his account at the end of the month. In addition to the above, the customer would, of course, pay the "float" charge on any out of town items he deposited with the bank.

CHAPTER VI

CONCLUSION - THE LAYMAN'S VIEWPOINT

In conclusion, one might summarize as follows:- Bankers realize that certain practices are desirable and needed for sufficient income and proper profits. The public has seen bank failure after bank failure and is anxious for a new order of things. Both banker and public are in a very receptive mood for better, sounder banking. Both realize that banking profits do not result from theories. There are well known factors which govern good bankers in the conduct of their banks. They are the result of years of practice, and are as fundamental and exact as the multiplication table, and for success must be used as freely and with just as little conscious effort. How is this to be done? Banks must acquire a different idea of the public and the public a different idea of banks. There still is a certain glamour or mystery about banking which must be dispelled.

An individual or a group feels the demand (or maybe it is just a desire) for the organization of a bank. The capital is accumulated, a charter acquired, an announcement is made that this bank is a home bank or a farmer's bank or what not, and then

comes the grand opening in beautiful quarters which have cost great sums of money. The public attends the opening, sees the beautiful floral offerings, the wonderful marble fixtures, the white collars on both officers and staff, and concludes that banking is really a "bed of roses". And why not? The interest is paid promptly--salaries are paid regularly --and all the little troubles are concealed with diligence from the public. There is an atmosphere of wealth and prosperity permeating the whole establishment. The public does not realize that this is just the "ballyhoo" much the same as one sees at the circus. Every move the bank makes seems to add more glamour and more mystery. One cannot blame the depositor for concluding there is some magical means beyond his comprehension whereby the banker can make ends meet and avoid the economic laws that govern any other successful business. The real tragedy, however, is that many bankers seem to have been obsessed with the same erroneous idea. They come to grief in many cases, and, in glaring headlines, the public, still mystified, is told of their fate.

The glamour and falsifying is wrong. The banker

should know the costs of the services he renders and the customer should pay for the services rendered to him. The bank would then make a fair profit. The income from the sale of services at a profit would be sufficient to offset the lowered income from earning assets. Liquidity can be maintained and profitable banking on this basis means safer banking. The measured service charge on checking accounts is the first step in the right direction. The customer pays for what he gets and the bank is paid for what it gives. Bankers have been quicker to see the need for a change than has the public, naturally. To the banker it means increased profits and larger income, while to the public it means paying for something which was once rendered free of charge. The only way in which sound banking on this basis will be accomplished will be through education. The public must understand that a profitable bank is the only safe bank, and that the few cents paid for services received means greater safety to the principal which has been entrusted to the bank for safekeeping.

CHAPTER VII

THE SIGNIFICANCE OF THE SUBJECT TO TEACHERS OF COMMERCIAL SUBJECTS

Just what does the commercial teacher gain from a study of this kind?

The objectives were the acquisition by the teacher of a background which would aid in teaching, and the securing of information which might be correlated with school work to make it more vital.

The degree to which the former was acquired can best be judged by the investigator because, by its nature it would be difficult to measure. The latter is evidenced quite completely by the amount of material gathered and included in this study.

Before one can say how valuable the date is for school work, it would be necessary to experiment with it in the classroom, by attempting to correlate it with the regular banking unit of work.

In the concluding pages of this study the writer has attempted to make an application of the material gathered. It should be remembered that these are only suggestions. Any teacher experimenting with the unit may find that special adaptations may have to be made to fit her special situations. The suggestions are given, however, with the hope that they may prove helpful.

SUGGESTED ADAPTATION

The value of having a checking account, with its many and varied services to the customer, is usually discussed, among other things, in connection with the regular banking unit. Because of the almost universal practice now of making charges for these services, the question of the equitableness of the charges is extremely pertinent. In the general discussion in the classroom the question of whether or not these charges are justifiable could be brought up either by the students or directly asked by the teacher. If it is possible to have the question come from the students, through skillful handling of the discussion, there will undoubtedly be greater interest in the subject.

The question having been raised, the teacher can then suggest that she knows where there are some interesting articles on the subject and supply the students with a short bibliography. It would be well to permit the students to make their own selections for reading. Such titles as "Competing with Santa Claus", "What Price Service?", and "Banker, Know Your Costs", will, no doubt, prove motivating forces and entice them into reading the articles. With all of

the members of the class cooperating, each adding his contribution of knowledge acquired to that of the others, it should not take very long for the students to acquire the necessary background for thinking.

One of the first things they will learn from their readings is the fact that the bank invests the money left with it on deposit, in the hope of making a profit. One small group could be given the assignment of securing information on loans in this connection. This would be an excellent opportunity for the students to get acquainted with the Readers' Guide to Periodical Literature in which they will find references on investments and loans. Their reading should lead them to an examination of the Federal Reserve Law, and how the government attempts to protect the funds of the depositor by limiting the banks to certain types of investments and loans.

After the discussion on earnings and the way in which the bank makes its money, the next natural step would be to examine the costs involved in making these earnings. They have been reading about costs and should have a foundation for thinking on this subject. As far as the writer was able to ascertain, no complete

outline of the allocation of costs was given in any of the magazine articles, therefore, a careful study of the plan given on pages 17 through 29 might be very worthwhile.

From this study of the allocation of costs, and from their readings the students will learn of the importance of the expense involved in running the checking account service. The detail on cost facts as given on page 31 of this study could be supplied to the students by the teacher. From a study of these costs they should not only get an idea of the per item costs, but should learn considerable about the operations of the bank, as it will be necessary for them to trace the items through the various departments to discover whether or not the cost is fair. For example: The deposit ticket cost is $.04 to the bank. Why? Where does it go after it is made out by the customer and put through the window of the Teller? The various steps in handling may be supplied by the teacher who has the background through experience, or might be found by investigation on the part of the pupils. In any event, the student must learn about the departments handling the deposit ticket, and the work

involved before a decision can be made as to the equitableness of the charge, and in this case four departments would be involved; Bookkeeping, Analysis, Statement, and Filing Departments. They will probably conclude, in the light of their knowledge acquired, that considering the time involved, the office space required, and the salaries of the clerks required to handle the item, the estimated cost of $.04 is reasonable.

Each item of cost given in this list could be studied carefully and a wealth of information secured. A thorough study of checks paid, for instance, would not only involve their regular work of learning to make out a check and the stub, but the cost to the bank. In tracing the check paid to find out why it costs $.03 to handle, while it costs but ½¢ for checks deposited, they would learn about the clearning house and the way it operates.

After a careful study they should come to a realization that after deducting all of these costs the banks profits are greatly reduced. The fact that the bank feels it is entitled to make a profit on demand deposits of from 1% to 1½% would probably be

brought out in their reading, but if not could be supplied by the teacher. This amount of profit should be discussed from the point of view of sound banking.
At this time, also, a discussion as to whether or not the bank should pay interest on demand deposits may be included. Are the services rendered by the bank sufficient to compensate the customer for the use of his money, or should the bank pay interest? The fact that the Bank Act of 1933 prohibits the payment of interest on these accounts should prove helpful in this discussion.

After the students have this background in earnings and costs, the question may arise as to whether checking accounts are really profitable to the bank. Here the teacher could supply the data collected in the analysis of accounts. Mimeographed copies of the accounts analyzed for January, February, March, April, May, and June, as shown on page 44, could be made for the class by the office training group in the school. It would be an excellent tabulation exercise for these students, as well as being of real service.

It is suggested that the first six months be used in the beginning as fewer accounts were analyzed, and it will be easier for the students to follow the

analysis. They have become familiar with the headings by this time so that they can do some intelligent thinking about these accounts.

They will probably make some generalizations. For example, of the fourteen accounts analyzed, only two showed a profit. In looking for the reason for such a large percentage of losses, their first judgment might be that it was due to the varying sizes of average collected balances. A careful study of three accounts with the same average collected balance, however, proves this judgment to be false. In each of the months, January, February, and March there was an account with an average collected balance of $1300. On one of these accounts the bank was able to make a profit of $.10 while the other two accounts resulted in losses to the bank of $13.95 and $29.48. On examining these accounts they found the main difference to be in the amount of services demanded by each account. When analyzed for activity they showed the following:-

January Account	February Account	March Account
10 Deposits	27 Deposits	4 Deposits
56 Checks Pd.	872 Checks Pd.	571 Checks Pd.
47 Checks Dep.	864 Chedks Dep.	4 Checks Dep.
	5 Collections	
113 Items	1768 Items	579 Items

After this analysis they will readily see that it is the activity of the account which makes it costly to the bank. They will see that there is a point, in a customer's account, beyond which the demand for services may make it a liability rather than an asset to the bank.

At this time the students might be supplied with individual analysis sheets, like the one on page 36, so that they might separate the data on the various accounts for careful examination. If they examined, for example, the first account given in January, where the average collected balance was $2,000 and yet the account showed a loss of $71.95, it would lead them to a problem for solution. On an average collected balance of $2,000, with earnings of $5.79, and a profit due the bank of 1%, or $1.66, what services is a customer entitled to?

He might work out his problem somewhat as follows:- Deduct from earnings the profit due the bank of $1.66. This leaves $4.13 for services which the customer is entitled to. Assume that the same number of deposits were absolutely necessary, and that the number of collections and base cost had to remain stationary, what other services would he be entitled to?

The account analyzed should look something like this:

37	Deposits @ 4¢	$1.48
2	Collections @ 22¢	.44
57	Checks Pd @ 3¢	1.71
10	Checks Dep. @ ½¢	.20
	Base Cost	.30
		$4.13

The above solution is only one way in which they could have worked out a satisfactory solution to this account, but the value in the analysis and solution is in realizing that no matter how the services are finally divided, the customer should know they are costly and use them with discretion. Instead of demanding services on 3,784 items, the requirements should have been on about 106 items. The point to should be made clear to the students here that the customer who asks the bank to operate an unprofitable checking account is not only undermining the security of his own funds, but those of every customer in that bank. The only safe bank is a bank operated on sound economic principles.

After the data on these accounts have been worked over carefully by the students, such summary tables as are included on pages 55-56-57-58-59-60-61-62-63-64 of this study would be extremely profitable from the

standpoint of summarizing the data for the students. They could be taught neatness and accuracy, incidentally, in setting up their work.

After the summaries have been made, it would be well for them to work out a profit and loss statement such as is given on page 65, as a basis for thinking further on the subject. The earnings and service charges give an income of $11,785.26, while the expense of running the accounts was $6,253.57, leaving a profit of $5,531.69. The students could make out a chart on the profitable accounts, such as is shown on page 66.

Considering the amount of money handled by the bank, as shown on page 55 ($4,498,837), and the risk involved in investing it, were these checking accounts worth handling? A discussion on this point would reveal that the banks did not feel that this was sufficient profit and were attempting to right the situation. It would be revealed that the bank, in placing the flat rate service charge on balances under $300 made the first attempt at correction. Our chart would show that the bank was justified in setting the figure at $300 since all accounts under that amount showed a loss. If students would apply the flat rate charge to these accounts they could see at once that it was both inadequate and unfair.

inadequate in that it does not really compensate the bank to any sizable degree for the losses, and unfair since the larger accounts, which might be unprofitable because of undue activity, would not be taxed.

Recognizing these facts to be true, they will look further for a more just plan. They will find the solution in the metered service plan. Here, again, references could be given for reading. The group to which the assignment is given, should report to the class their findings. The various plans discovered might be discussed and a final selection of the best plan; best from the point of view of fairness to the customer. The plan given on pages 93 through 99 of this study, will probably prove to be the best plan. One method of having the students find out whether or not the plan is just, would be to have them apply the plan to the accounts on which they have the data. They could see the degree to which it corrected an unsound economic situation. For a sample of how the plan operates, the teacher could supply the form given on page 100.

The unit of work should be concluded by having the students summarize their thoughts from the

knowledge acquired by setting up some principles of sound banking practices. They might outline the kind of bank which they would consider desirable for their community.

The suggestions given here are only a few. There is no guaranty that they will work out as planned here. Many changes might have to be made for particular situations. The writer does, however, believe that the theory behind the unit to be correct; that is, that in school work, especially in the commercial field, there is a definite need for getting at the problems of business, and using these problems as a basis of school work, if we hope to develop citizens who can cope with present day problems after they leave the schoolroom and go into business. They need a thorough understanding of life situations rather than a superficial knowledge.

It is the opinion of the writer that such a unit as it outlined here will gain the desired outcomes.

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